

Sept./Oct. 1980

Volume 30

Number 5

\$2.00

In this issue:

Craftsmanship

Fancy the Ornament

Architecture for Health

The John Sealy Hospital

Texas Tomorrow

Texas Architect



Sept./Oct. 1980
Volume 30
Number 5
\$2.00

In this issue:
Craftsmanship
Fancy the Ornament
Architecture for Health
The John Sealy Hospital
Texas Tomorrow

Texas Architect





reff

exceptional furniture for the home and office...

3210 eastside st., houston, texas 77098 (713) 522-7820

Circle 2 on Reader Inquiry Card

Your best ideas look better with Rayflect™



A great idea begins on paper. But your best ideas really come to life when you add the beautiful finishing touch of Rayflect coated glass from Advanced Coating Technology.

ACT is known for quality. Our superior coating techniques provide excellent solar rejection ratios, in turn allowing your clients to save valuable energy dollars. For maximum energy efficiency, Rayflect coatings re-radiate infra-red and ultraviolet light. Whether you spec clear, gray, bronze or blue-green, our coatings reduce glare and provide more uniform daylighting in work areas. Outside, the uniformity of Rayflect color assures minimal checkerboarding and distortion effects.

ACT is known for service, too. We back our products with a limited 10-year warranty against peeling, cracking or deterioration. We'll work closely with you from initial specs to final delivery, making sure your order is handled efficiently and filled quickly — the way you like to do business.

Make your good ideas better than ever. With Rayflect, from Advanced Coating Technology, the more you look the better we look.

Circle 1 on Reader Inquiry Card

For more information, see Sweets #8.26, or write:

Advanced Coating Technology, Inc.

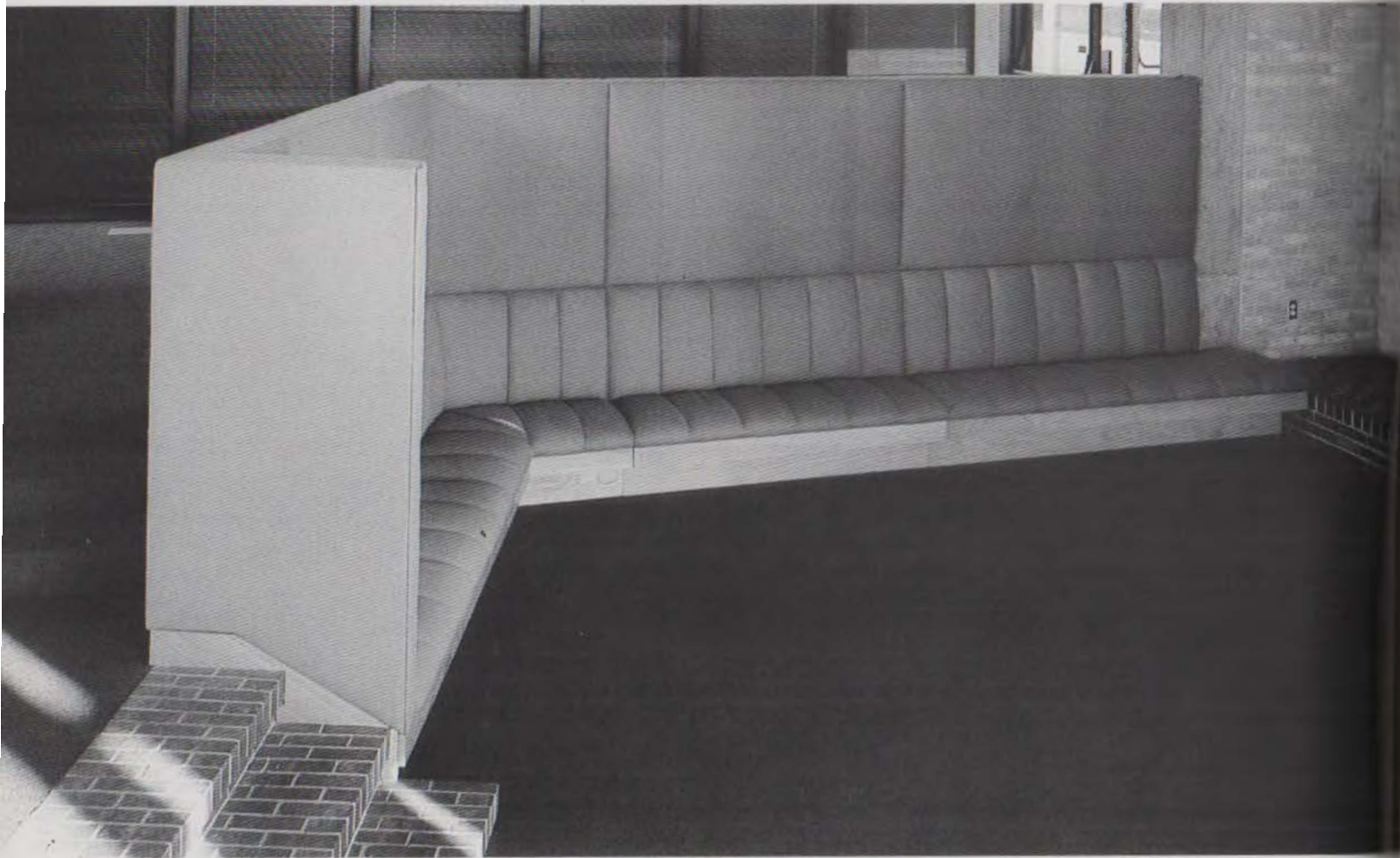
Rayflect Division, A subsidiary of Worthington Industries, Inc.

306 Beasley Drive, Franklin, Tennessee 37064 • 615-790-6001 • Telex 55-5145

Powers 12 Building
Houston, Texas
Architect: Spencer, Herolz & Durham
Glazier: Hendrix Glass & Mirror
5088 Monolithic Reflective



KISABETH FURNITURE



Showroom & traveling representative areas open: Los Angeles, San Francisco, Chicago, New York, Philadelphia, Washington, D.C., Kansas City, Miami. Contact Kisabeth.

KISABETH CRAFTSMANSHIP

A piece of furniture may look beautiful when new, but because of inferior construction materials and methods, the original straight lines, distinctively sharp tailoring, or luxurious soft lines may not endure. This can diminish the effect of even the most well designed room. Kisabeth craftsmen know that there are no short cuts in the production of pieces that meet the exacting standards laid forth by centuries of the finest furniture makers. That's why from frame to upholstery, from materials to production methods, immaculate care is given to each piece of Kisabeth furniture.

Kisabeth frames are made only of the finest #1 common kiln-dried 5/4 ash and magnolia hardwood. Corners are fitted firmly with corner blocks, then glued and screwed into place. Stock of 8/4 and 12/4 is used generously when it is beneficial to the structural improvement of the frame. All rails and posts are double-dowelled, glued and screwed into place to ensure that the frame will hold its original shape through years of use. As a result, Kisabeth frames are heavier and more durable than those used by most manufacturers.



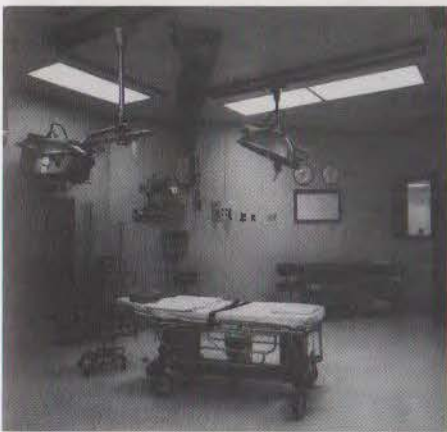
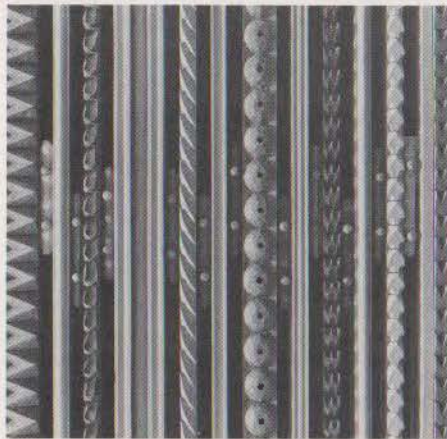
Our catalog offers you over 200 tables, sofas, chairs, sleepers, recliners, barstools, dividers, armrests, beds and headboards to select from. For especially conceived pieces, our staff is long experienced at working with your drawings to create comfortable, functional, enduring furniture for any use. No other furniture speaks so well about you, the designer.

SHOWROOMS: Denver CO/Blake House • New Orleans LA/Designers Rue • Detroit MI/E. J. Enterprises, Ltd. • Boston MA/Leonard B. Hecker & Associates • Dallas TX/Kisabeth • Houston TX/Kisabeth • Seattle WA/Glacier Fabric Corp.

Carl Kisabeth Co., Inc. 5320 Glenview Drive Fort Worth, Texas 76117 (817) 281-7560 Metro 498-5876

Circle 3 on Reader Inquiry Card

Contents



On the Cover: Detail view of main gallery level upon entering the Kimbell Art Museum in Fort Worth, designed by Louis Kahn. Photography by Phillip Poole, Phillip Poole Associates, Fort Worth.

In the News 13

About this Issue 25

Craftsmanship 26

Michael Benedikt, an assistant professor of architecture at UT-Austin, offers a definition of "craftsmanship," an explanation of its significance for both producer and beholder, and, implicitly, a challenge for architects to design for it.

Fancy the Ornament 38

Buie Harwood, an associate professor of interior design in the Department of Home Economics at UT-Austin, examines a surprising wealth of "people's art," Victorian and vernacular decorative painting, applied to Texas interiors in the late 19th and early 20th centuries.

Architecture for Health 48

Editor Larry Paul Fuller draws an overview of current trends in health care design from presentations made at a recent Houston seminar on health facilities sponsored by the Texas Society of Architects and the Texas Hospital Association.

The John Sealy Hospital 52

Larry Wygant, associate director for history of medicine and archives at the Moody Medical Library in Galveston, discusses the various influences on Nicholas Clayton's design of the original John Sealy Hospital in Galveston. Allusions to miasma, contagion and Florence Nightingale.

Texas Tomorrow 60

Concluding our series of excerpts from the six essays which served as the bases for discussion during TSA's Lakeway Goals Conference in March: "Growth, Resources, Environment," by Catherine H. Powell, an assistant professor in the Department of Urban Studies at Trinity University in San Antonio; and "Architectural Education in the 1980s," by James Pratt, FAIA, a principal in the Dallas architectural firm Pratt Box Henderson & Partners.

Craftsmanship: a Cold Can of Coors 83

Contributing Editor David Braden, FAIA, Dallas, expounds on a somewhat refreshing idea of craftsmanship, with a sobering thought or two on its potential for wider application.

Letters 87

Coming Up: The November/December issue of Texas Architect will consider the city of Dallas and its architecture in conjunction with the Texas Society of Architects' 41st Annual Meeting at the Hyatt Regency Dallas Nov. 6-8.

Texas Architect is published by the Texas Society of Architects, Des Taylor, Executive Vice-President.

Larry Paul Fuller Editor
Michael McCullar Associate Editor
John Lash Associate Publisher
Sandy Otey Circulation Manager
Hyder Joseph Brown, AIA Editorial Consultant

Contributing Editors

David Braden, FAIA; James Coote; Clovis Heim-sath, FAIA; Peter Papademetriou, AIA; David Woodcock

Publications Committee

Alan Sumner (chairman), David Browning, Jack Craycroft, Dennis Felix, Eugene George, Larry Good, Craig Kennedy, Dave Mayfield, Mervin Moore, Jack Tisdale, Barry Weiner

Texas Architect is published six times yearly by the Texas Society of Architects, the official organization of the Texas Region of the American Institute of Architects. Address: 2121 Austin National Bank Tower, Congress at Sixth, Austin, Texas 78701. Telephone: 512/478-7386. Subscription price is \$8 per year for TSA members and \$10 for non-members per year for addresses within the continental United States excepting Hawaii and Alaska.

Texas Architect is available on microfilm and microfiche from Micropublishers International, 58 Old South Country Road, South Haven, New York 11719.

Controlled circulation postage paid at Austin, Texas 78701.

Copyright 1980 by the Texas Society of Architects. Reproduction of all or part of editorial material herein without written permission is strictly prohibited. Editorial contributions, correspondence and advertising material is invited by the editor.

Appearances of names and pictures of products and services in either editorial or advertising does not constitute an endorsement of same by either the Texas Society of Architects or the American Institute of Architects. Nor does editorial comment necessarily reflect an official opinion of either organization.

BPA membership applied for May 1979.

ISSN: 0040-4179.

TSA Officers

Boone Powell, FAIA, San Antonio President
Lee Roy Hahnfeld, Fort Worth President-Elect
Jerry Clement, Dallas Vice-President
Johnny Cotten, Corpus Christi Vice-President
Jim Doche, Amarillo Vice-President
Paul Kinnison, Jr., San Antonio Vice-President
Frank Welch, FAIA, Midland Vice-President
Morton L. Levy, Jr., Houston Secretary
Nancy R. McAdams, Austin Treasurer
Des Taylor, Austin Executive Vice-President

TSA Board of Directors

M. R. Newberry Abilene Chapter
Darrell Fleming Amarillo Chapter
Chuck Croft Austin Chapter
Duane Cote Brazos Chapter
Donald Greene Corpus Christi Chapter
Jim Clutts Dallas Chapter
W. E. Kuykendall El Paso Chapter
Robert LeMond Fort Worth Chapter
A. William Modrall Houston Chapter
Calvin Walker Lower Rio Grande Valley Chapter
Tom Mills Lubbock Chapter
Carroll Sinclair Northeast Texas Chapter
John Williams San Antonio Chapter
Milton Bell Southeast Texas Chapter
David Carnahan Waco Chapter
Ernest W. Babb, Jr. West Texas Chapter
J. G. Dixon, Jr. Wichita Falls Chapter
Elliott Kerl Association of Student Chapters/AIA

No two Action Office® installations are alike. Because no two organizations are alike.

Herman Miller's Action Office® system takes its cues from the particular needs of your organization.

To provide carefully tailored work environments that support a wide variety of tasks.

To improve communications between individuals and among entire departments.

To allow a custom appearance that considers both organizational image and employee personalization.

To position vital work surface, filing, reference and display functions into the zone easiest for people to see and reach – while reducing floor space needs by as much as 20%.

What's more, your Action Office environment will adapt easily to changing work activities and communication patterns – at a fraction of the usual cost. With proper planning, you can affect office reconfigurations for *less than \$1 per square foot* compared to over \$20 per square foot for restructuring fixed wall environments.

The Action Office system by Herman Miller. It's more than a place to work. It's a way to work better. Call us today for complete information.

 herman miller



**Herman Miller products
are available through
the following dealers:**

Austin

The Office Co.
4009 Medical Parkway
512/459-4131

Marshall Clegg/Associates, Inc.
111 West Anderson Lane
512/454-5851

Corpus Christi

John H. Yochem Co.
612 South Staples
512/882-2937

Dallas

Metroplex Business Interiors
2600 Stemmons Freeway
214/630-7200

El Paso

B.P.S.I.
511 Executive Center
915/544-8710

Ft. Worth

Ted Roos & Associates
2824 West Seventh
817/336-4766

Harlingen

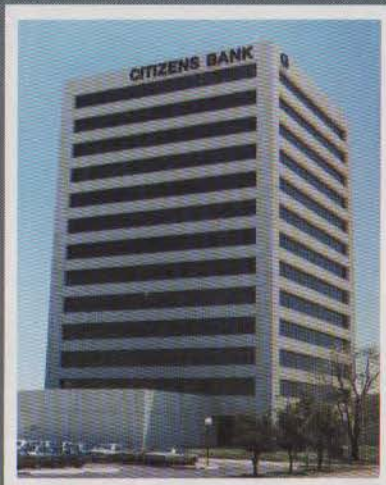
Delta Office Supply
301 East Jackson
512/423-6120

San Antonio

Marshall Clegg/Associates
130 Soledad
512/226-5141

Tyler

Ables Land
420 South Fannin
214/593-8407

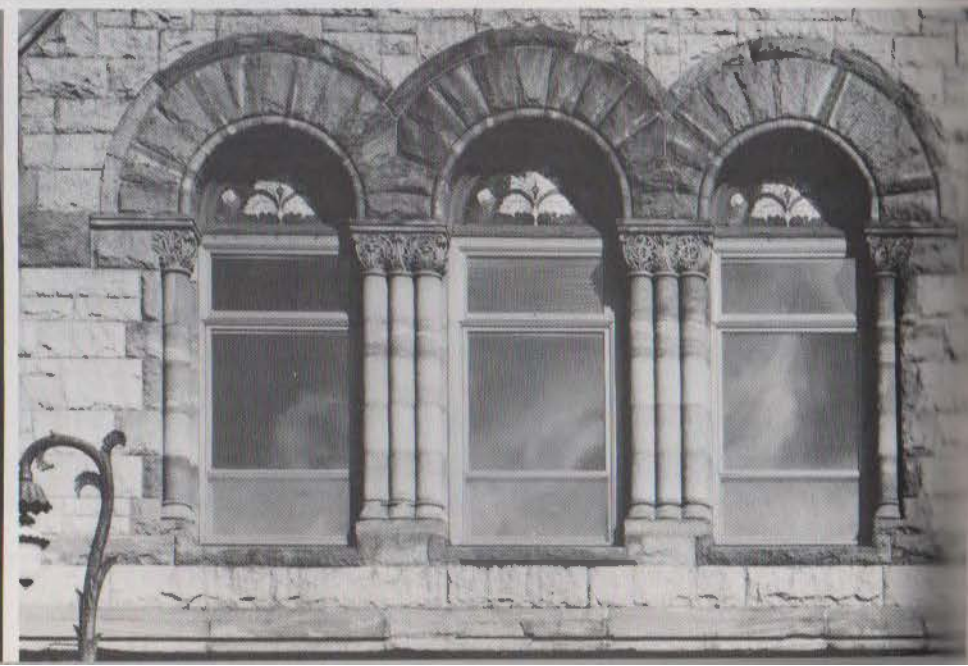
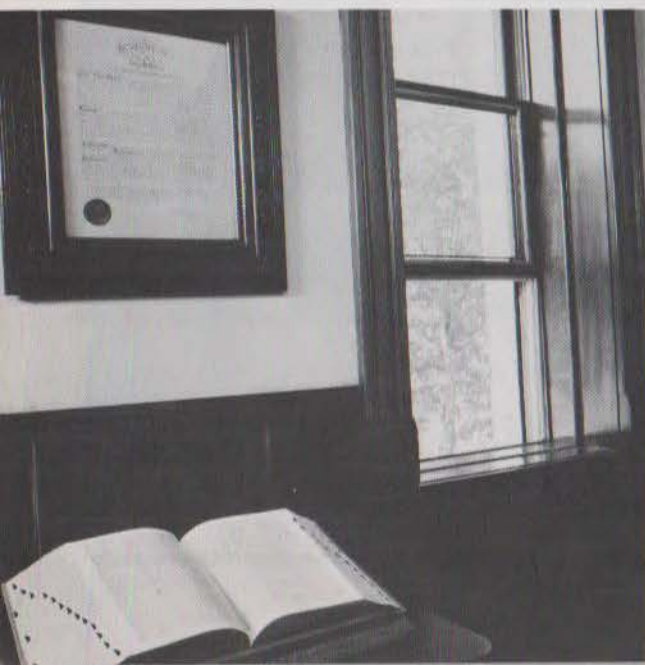
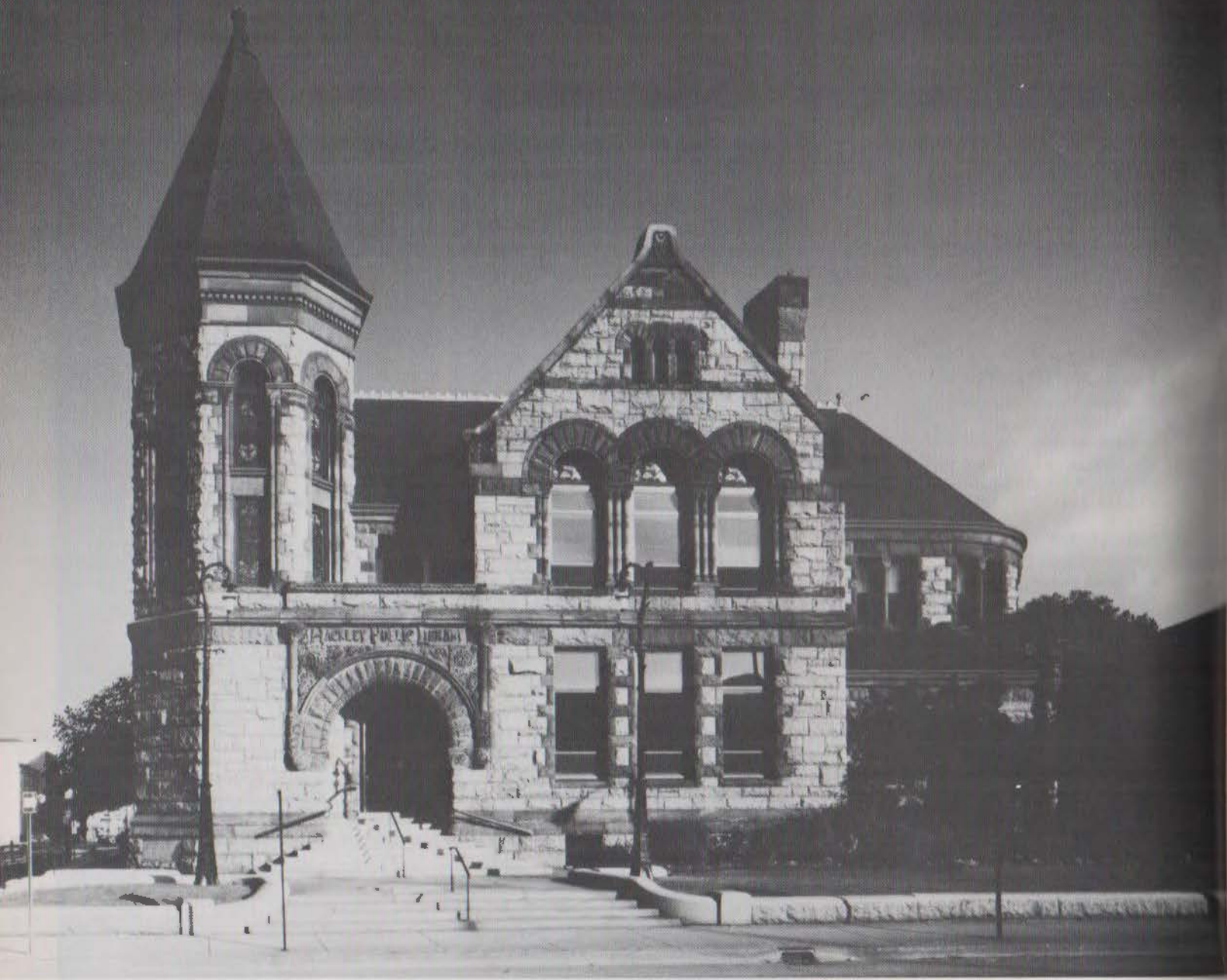


Flex-Kote.
**The textured
exterior coating
you can bank on.**

And Citizens Bank in Richardson, Texas has done just that. Flex-Kote by Dan-Tex has been on the outside of this building, protecting it and looking great for six years. In fact, we have over twenty years of other successful case histories just like this one.

For concrete, masonry, primed wood, galvanized metal or drywall, remember Flex-Kote. Citizens Bank wouldn't settle for less. Neither should you.

**Dan-Tex Paint & Coating Mfg. Co.
P.O. Box 18045, Dallas, TX 75218**



The architect wanted a maintenance-free classic look outside, but insisted on the traditional warmth of wood inside.

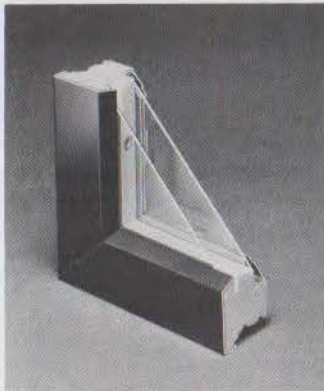
Only a Pella package could improve the outlook of this grand old building.

In Grand Rapids, Michigan, the eighty-year-old Hackley Library looks old anew. The architect supervising its renovation chose Pella Clad Contemporary Double-Hung Windows for their subtle beauty, their ability to blend right in with interior and exterior design. Inside, the natural wood was stained to match the original decor. Outside, the aluminum cladding gave maintenance-free protection against the elements.

With energy-saving in mind, the Pella Double Glass

Insulation System with Slimshade® was chosen. Maintenance was a consideration, too. Because they're in the dust-free space between two panes of glass, Slimshades seldom need cleaning and they're protected from potential abuse. The window itself can be cleaned easily, both outside and in, from inside the building.

The result is a grand old library rejuvenated by the maintenance-free, energy-conserving advantages of a contemporary Pella package.



Pella offers a tough aluminum cladding in attractive colors outside—the warmth and beauty of wood inside. Aluminum exterior is cleaned, etched and coated with high-temperature baked acrylic polymer. Won't chip, crack or peel.



Pella's Contemporary Double-Hung Window pivots for quick, easy washing of outside glass from inside the building. This feature also makes sash removal for re-glazing easy and economical.



Pella's Double Glass Insulation System has a full 13/16" air space between panes — provides maximum insulation at lowest costs. Precision wood construction and snug weatherstripping make it truly Energy-Tight.



Pella's optional Slimshade® fits in the dust-free space between the panes of the Pella Double Glass Insulation System and provides privacy and light control at the touch of a dial. Helps reduce heat loss and solar heat gain, as well.

For more detailed information and a copy of our 28 page full color catalog on Pella Clad Windows & Sliding Glass Doors, contact one of the Texas Pella distributors listed below.

Hackley Library
Grand Rapids, Michigan
Architects:
Hooker, DeJong Associates
Project Architect:
Kenneth Hooker
Owner:
Muskegon Public Schools

Texas Pella Distributors

Pella Products Co.
8900 Shoal Creek, Suite 105
Austin, Texas 78758
512/453-2301

Pella Products Co.
904 Fountain Parkway
Grand Prairie, Texas 75050
(metro) 214/647-4321

Pella Products/West Texas
301 S. E. Loop 289
Lubbock, Texas 79404
(806) 745-1649

Louis P. White Co.
8802 Tradeway
San Antonio, Texas 78217
512/826-8641

Pella Products Co.
717 Bradfield Rd.
Houston, Texas 77060
713/931-4344

Pella Products Co.
2729C Fondren
Houston, Texas 77063
713/784-2340



© 1979 Rolscreen Co.

Only Pella offers it all.

Circle 6 on Reader Inquiry Card

Franciscan Ceramic Tile

...the contemporary ceramic medium
for expression of architectural creativity

Use standard shapes and colors
to create a custom look...



Eastland Mall, West Covina,
California—three New Natural
Terra Grande colors working
together to create a totally
custom look. Architect:
Ronald T. Aday, Inc.

Combine standard and custom
products together to create
the look you want...



East Los Angeles Health Center,
Los Angeles, California—five
standard Terra Grande glazes
combined with six custom glazes
to create a dramatic graphic
pattern. Also note the inset mural
specially designed for this
structure. Architect: Daniel,
Mann, Johnson & Mendenhall.

Or work with our design team
to create the product you want
for the environment you want.



Sportsman Park, Chicago,
Illinois—Franciscan's design
team worked with noted artist
Leroy Neiman to translate his
original oil on canvas into a
ceramic mural on 12" x 12" tile.

Texas Distributors

Dallas

American Tile
2839 Merrell Rd.
214/243-2377

Ft. Worth

American Tile
3133 Bryan St.
817/924-2233

Austin

American Tile
3100 Industrial Terrace
512/837-2843

El Paso

El Patile
10015 Carnegie
915/592-4138

Houston

Great Southern Supply
3637 West Alabama
713/644-1751

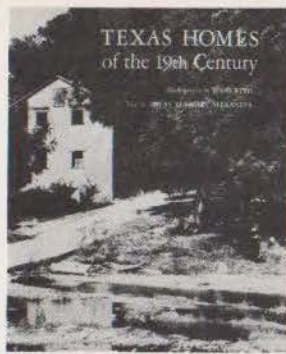
See Sweet's Architectural and
Interior Design Files

Franciscan

or contact:
2901 Los Feliz Blvd.
Los Angeles, California 90039
(213) 663-3361

Member of the Wedgwood Group

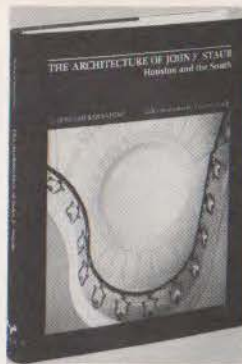
Architecture, Art, Energy, Design, History, Business, Preservation. . . .



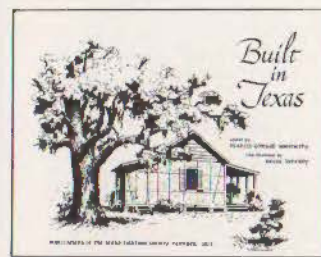
Texas Homes of the 19th Century
Alexander, \$25.00 (hard)



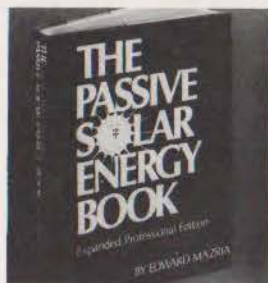
Architecture of the Western World, Raeburn
\$37.50 (hard)



The Architecture of John F. Staub
Barnstone, \$35.00 (hard)



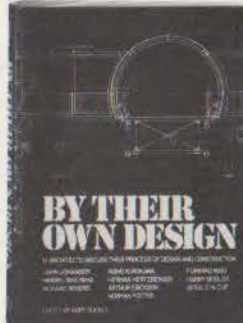
Built In Texas
Abernathy & Kennedy
\$24.50 (hard)



Passive Solar Energy Book
Pro. Ed., Mazria
\$24.95 (hard)



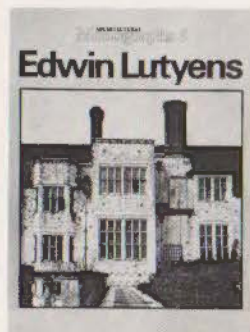
Architects on Architecture
Heyer \$12.95 (paper)



By Their Own Design
Edited by Suckle
\$19.95 (hard)



Complicity and Conviction: Steps Toward an Arch. of Convention, Hubbard, \$12.50

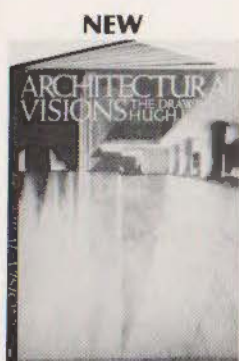


Architectural Monographs
\$16.50 each, (paper)

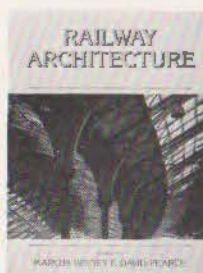
Edwin Lutyens (1979)
Michael Graves (1979)



AD Profiles (paper)
Bruce Goff (1979)
Beck, \$9.95
Britain in the Thirties (1980)
Stamp, \$12.50
France (1979)
Edited by Beck, \$9.95
Neo-Classicism (1980)
Broadbent, \$12.50
Roma Interrotta (1979)
Beck & Graves, \$9.95
Violet le Duc, \$12.50 (1980)
Alberti (1979)
Edited by Beck, \$9.95



Architectural Visions: Drawings of Hugh Ferriss
\$19.95 (hard)



Railway Architecture
Binney & Pearce, \$29.95



Bizarre Architecture
Jencks, \$12.50 (paper)



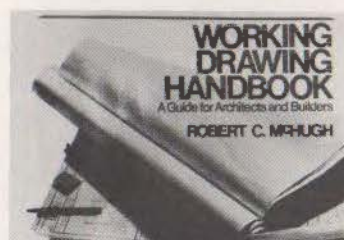
The Glass House
Hix, \$22.50.
Now \$15.00



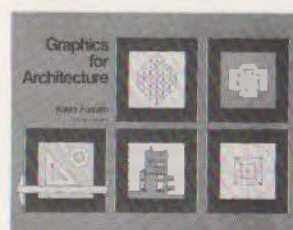
Furniture by Architects
Page, \$25.00 (hard)



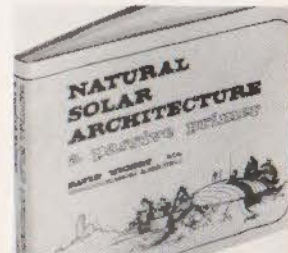
Preparing Design Office Brochures: A Handbook
Travers, \$10.00 (paper)



Working Drawing Handbook
Robert C. McHugh, \$6.95 (paper)

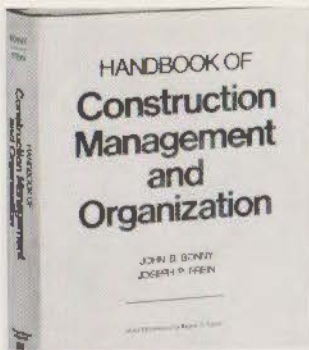


Graphics for Arch.
Forseth, \$8.95 (soft)

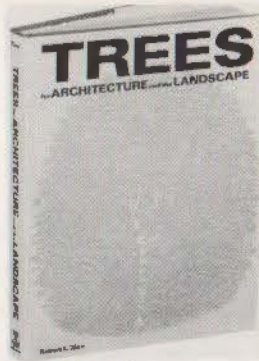


Natural Solar Architecture
Wright, \$8.95 (paper)

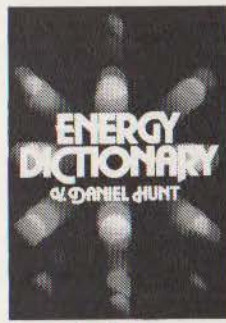
Architecture, Art, Energy, Design, History, Business, Preservation, . . .



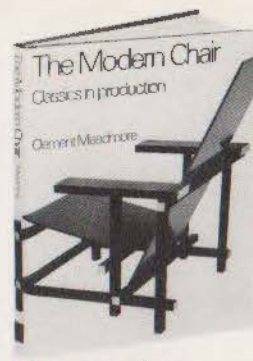
Handbook of Const. Mgt.
Bonny & Frein, \$42.50



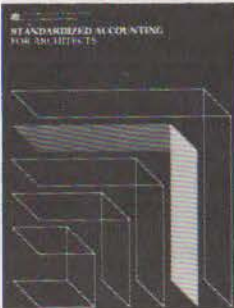
Trees for Arch.
2 cond. ed. Zion, \$11.95



Energy Dictionary
Hunt, \$22.50 (hard)



The Modern Chair
Meadmore, \$7.95 (paper)
NEW



Standardized Accounting for Architects AIA, \$16.00



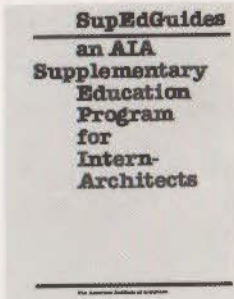
Historical Preservation Manual TSA, \$20.00



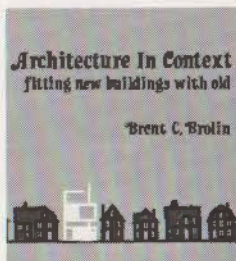
Earth Sheltered Housing
\$9.95 (soft)



Judith Turner Photographs Five Architects, \$27.50 (hard)
Available November



SupEd Guide
AIA, \$32.00



Arch. in Context
Brolin, \$16.95

LIVING SPACES



Living Spaces
Magnani \$22.50 (hard)



New Interiors for Old Houses, Debaights \$24.95



Public Relations for the Design Professional
Jones, \$21.50 (Hard)

Ordering Information

Please place all orders through the **Texas Society of Architects, 2121 Austin National Bank Tower, Austin, Texas 78701, 512/478-7386**. Orders can be placed either by phone or through the mail and are filled the day they are received.

| Quantity | Publication Title | Price | Total |
|----------|-------------------|-------|-------|
| | | | |
| | | | |
| | | | |
| | | | |

Postage Charges:
 under \$10.00 — \$0.75
 10.00 to 20.00 — 1.25
 20.00 to 30.00 — 1.75
 30.00 to 50.00 — 2.50
 over 50.00 — 3.00

Please send an AIA contract & documents price list and order form.

Sub-Total _____
 Plus 5% Sales Tax _____
 Plus Postage _____
 Total Due _____

All packages are sent fourth class. First-class or special delivery fees, when requested, will be billed to the purchaser.

Name _____
 Address _____
 City _____ State _____ Zip _____

KEMLITE HAS SOLVED THE PROBLEM OF QUALITY VS. COST IN FRP BUILDING PANELS.

Quality material at a reasonable cost. Time was when you couldn't have both. Either it was consistent quality material at a premium price, or it was low cost material lacking in product integrity.

Sound familiar?
Not anymore!



A new frp building material that is specially formulated to meet the strict standards required in your processing facility. Durable. Easy to clean. USDA accepted. With a

brighter, whiter embossed finish. Physical properties designed for the construction industry. A flame spread rating and smoke development that meets all major model building codes.*

All this and more: Glasbord-P is now available at a distributor near you with a quality you can trust at a price you can afford.

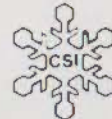
Get the answer to the quality vs. cost problem. Call or write today for additional information. You'll be glad you did.

Also, ask about our FM approved Fire-X Glasbord_® paneling.



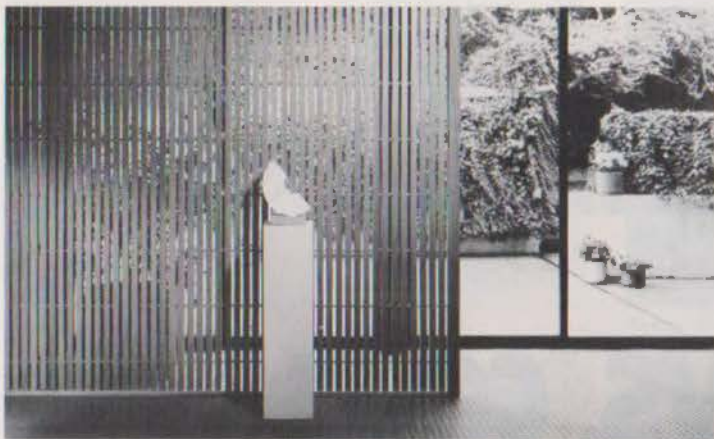
**Southwest
Vault Builders, Inc.**

126 Oregon Avenue
Dallas, TX 75203
214/948-1431



Cold Spaces, Inc.

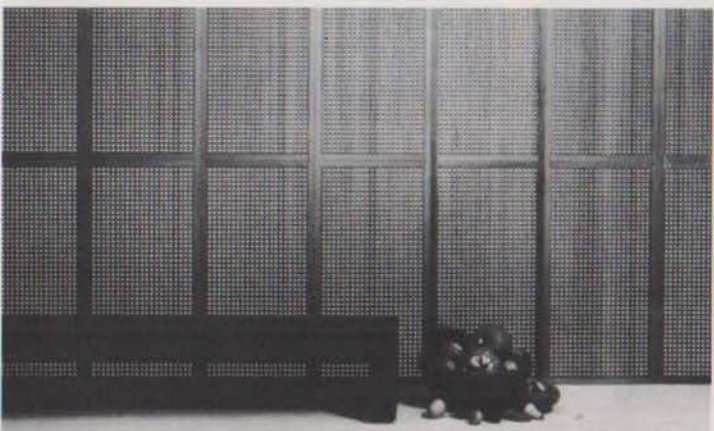
8423 Rannie Street
Houston, TX 77080
713/462-0032



Dowelok Grilles



Interlok Grilles



Sculpturewood Grilles



Panelcarve Grilles

Forms & Surfaces presents a comprehensive collection of wood grilles for room dividers, walls, and ceilings.

Constructed of the finest quality solid woods or selected hardwood veneers on composite wood cores, these grilles are handsomely detailed and handcrafted. A Rapid Response Program offers shipment of a select group of designs and woods within two weeks.

FORMS+SURFACES

Projects, People, Schools, Books, Firms, Events, Products

Edited by Michael McCullar



Rendering of renovated SAMSCO complex in San Antonio.

State Finally Approves State Office Building Project in San Antonio

The state Purchasing and General Services Commission voted in August to award \$3.167 million in contracts for the renovation of the old SAMSCO complex in East San Antonio as the first multi-tenant state office building outside Austin.

Final go-ahead on the project marked the successful end of an arduous campaign by the San Antonio Conservation Society, City Council, East Side community groups, the architectural firm Ford, Powell & Carson, and state Rep. Lou Nella Sutton, whose late husband and predecessor in the House, Rep. G. J. Sutton, first proposed the SAMSCO renovation plan in 1973.

Opposing the project were downtown San Antonio building owners who feared that reuse of the complex as state office space on the East Side would drain office tenants away from the central business district.

Gov. Clements also voiced some influential doubt about the project after the state legislature already had appropriated \$3.6 million for the renovation. According to the *San Antonio Express-News*, Clements told reporters in November

1979 that he "was not at all pleased" with plans to renovate the abandoned San Antonio Manufacturing Co. foundry. Accordingly, Clements asked the Purchasing and General Services Commission to re-evaluate the cost effectiveness of such a plan, compared to continued leasing of state office space.

Much of the delay in getting final commission approval was due to the state requirement that the project's cost stay within the \$3.6 million appropriation yet still provide the full 78,000 square feet of office space originally specified in the legislation. Also, construction contracts had to be awarded before Aug. 31, 1980, the end of the state's fiscal year.

Charging that architects failed to meet those requirements in their initial designs, the commission—chaired by Clements appointee Bod Dedman—continually postponed its decision. Then state Atty. Gen. Mark White issued an informal opinion in March stating that, although the project cost must indeed be limited to \$3.6 million, it need not contain 78,000 square feet of office space. Meanwhile, architects presented a revised set

of plans which included the original 78,000 square feet for \$40,000 less than the original appropriation.

Then in April the commission asked architects if the firm would be willing to "gamble" part of its fee if construction contracts did not come in under the budget. Questioning the propriety of such a proposal, architects respectfully declined.

The project, scheduled for completion in 1981, involves renovating three buildings in the complex, providing 78,000 square feet of office space and 35,000 square feet of warehouse space. The major tenant will be the Texas Department of Human Resources.

TENRAC Committee Puts Forth Recommendations For Solar Application

All new state "structures" built after Aug. 31, 1981, should be required to employ passive and active solar systems for space heating, cooling, water heating and interior daylighting, according to a state solar advisory committee.

Revising its initial recommendations after a public hearing in August, the committee, which advises the Texas Energy and Natural Resources Advisory Council, recommended that such systems be used "except where the use of a particular system is clearly not in the public interest." The "public interest" would be determined by life cycle cost analysis.

An early recommendation that the Texas Board of Architectural Examiners require its license applicants to demonstrate a basic understanding of energy conservation and the use of renewable energy resources was deleted from the committee's final recommendations.

TBAE Executive Director Phil Creer, FAIA, responded to the initial proposal in an Aug. 20 memo to TENRAC, stating that both the Qualifying Test and

the Professional Examination already include questions on energy conservation. And although neither exam addresses renewable energy resources, Creer pointed out, TBAE has no authority on its own to add anything to the exams, which are prepared by a national committee composed of members from the various state licensing boards.

Other recommendations, which will be presented to TENRAC for its endorsement in September, include:

- determining the available resources in the state that would allow engineers, architects, designers and planners to more adequately design solar systems;
- adoption by local building officials of DOE's "Document for Code Officials on Solar Heating and Cooling of Buildings" for use as part of local building codes;
- state adoption of standards for testing solar collectors and systems based on those of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE);
- establishment of a Texas Solar Bank to provide low interest loans for residential applications of solar energy;
- encouraging a voluntary program by the Texas Public Utility Commission and Railroad Commission in which the electric and natural gas utility companies participate in financing the purchase and installation of solar water heaters; and
- encouraging the use of solar energy for heating swimming pools, in lieu of heaters that use oil and gas.

Texas Construction Activity Shows 11 Percent Decrease For First 6 Months of 1980

Total construction contracts in Texas reflect an 11 percent decrease for the first six months of 1980 compared to the same six-month period in 1979, McGraw-Hill's F. W. Dodge Division reports.

According to George A. Christie, Dodge vice president and chief economist, contracts for residential, non-residential and "non-building" construction statewide totalled \$6,123,195,000, down from a total of \$6,904,424,000 for the same period in 1979.

Non-building construction includes such projects as streets and highways, bridges, dams and reservoirs, river and harbor developments, sewage and water supply systems, missile and space facilities, airports, utilities and communication systems.

Photo courtesy Bell, Klein and Hoffman



Sam Houston Home in Huntsville.

Sam Houston Home: Clapboard or Log, Porch or No Porch?

Controversy over an historic building usually involves a conflict of interest between those who want to preserve it and those who want to tear it down. In Huntsville, however, an unusual battle is being waged between Walker County preservationists and Sam Houston State University officials and their architects over the most authentic approach to restoring the historic Sam Houston Home.

The dispute, in court at press time, involves the Walker County Historical Commission, SHSU regents and the Austin architectural firm Bell, Klein and Hoffman. The historical commission believes that proposed plans for restoring the building, calling for the removal of the white clapboard siding and a Greek Revival front porch to expose original log construction underneath, would violate the vintage architectural integrity of the building and not come anywhere close to portraying the house as it was when Sam Houston lived there in the 1850s.

SHSU regents and architects, on the other hand, contend that restoration plans are as accurate as they can be, based on thorough historical research and detailed architectural and archaeological investigation of the structure and the site.

South Padre Developments Escape Hurricane Allen Fairly Unscathed

The multi-million dollar strip of condominiums and hotels on South Padre Island, the narrow barrier of sand between the Gulf and the Texas mainland, survived Hurricane Allen without the massive damage many expected from what had been called the century's second-worst hurricane.

Allen, which steadily lost power as it swirled for hours just off the Texas coast

The Sam Houston Home is both a National Register Landmark and a Recorded Texas Historic Landmark. The state legislature appropriated some \$280,000 for the restoration project in 1979.

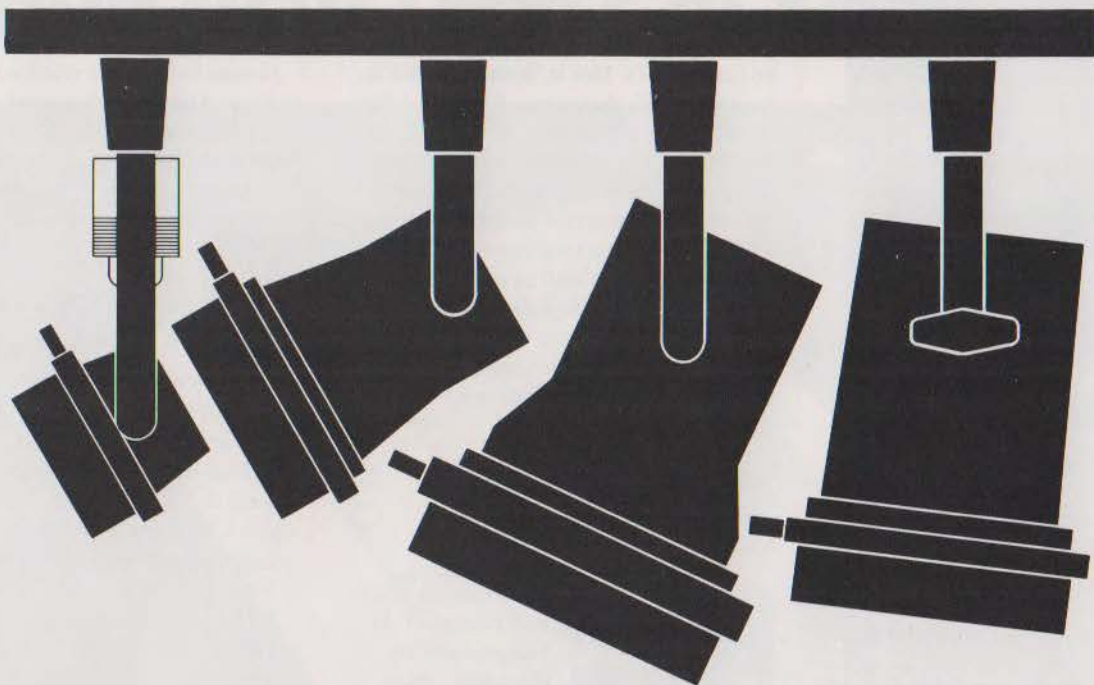
According to Curtis Tunnell, an archaeologist with the Texas Historical Commission, there is no direct evidence—such as a photograph of Houston himself sitting on his front porch—that would indicate exactly what the house looked like in the 1850s. Tunnell says that the Greek Revival porch, in fact, was actually added on in 1957, although old photographs do show that the house had a similar porch in the 1890s.

A restraining order has stopped work on the project, and a Huntsville judge has ruled that SHSU must obtain a permit from the state Historical Commission's Antiquities Committee before the project can resume. Meanwhile, the university has appealed the ruling, and the building stands fenced and locked.

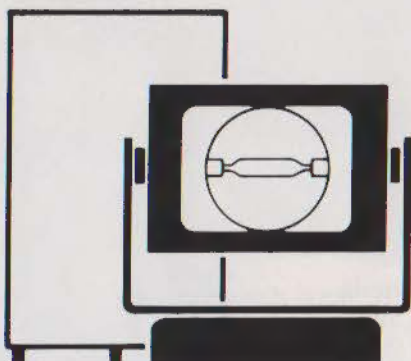
"It's really an architectural problem," Tunnell says, "and a difference in philosophy. Both sides present strong arguments, and both sides want to do what's best for the structure."

Aug. 10, was expected to be the first major hurricane to test many of the hurricane-resistant structures that have been erected on the island in the past decade.

As it turned out, though the storm proved not as intense as many had feared, high winds and seas raged over South Padre at the hurricane's peak, covering the island with more than 10 feet of



LOW VOLTAGE SPOTS



LIGHTING SERVICES, INC.

manufacturers of:

pinspots
spotlights
glass color filters
track lights
quartz lights
downlights
uplights
recessed lights

Dealers

Hurst

DAVID BARFIELD INTERIORS
(metro) 498-7451

Houston

HOWARD-GOSSETT
(713) 661-4646

Hallettsville

KELKAR'S INTERIORS
(512) 798-3283

Dallas


RUSH ART SUPPLY
(214) 522-0610

Represented by

**ernest low
& associates inc**

611 World Trade Center
Dallas, Texas 75258
(214) 747-8839

1008 Wirt Road, Suite 170
Houston, Texas 77055
(713) 686-9999



**Timber Trusses
Timber Decking
Laminated Timbers**

Texas Timbers, Inc.
*Texas Oldest Fabricator Of
Structural Laminated Timber*

Box 267 / LaGrange 78945 / (713) 968-3256

Circle 12 on Reader Inquiry Card



K+Σ

ENGINEERS
ARCHITECTS
ARTISTS
SUPPLIES

REPRODUCTION
SPECIALISTS

M

**MILLER
BLUE PRINT CO.**

501 WEST SIXTH ST.
AUSTIN, TEXAS 78767
PHONE 512/478-8793
MAIL ADD BOX 2065

Circle 11 on Reader Inquiry Card

water.

According to architect Troy Brown and engineer H. G. Doyle, both with Dallas-based SHWC, designers of many of the South Padre structures, most of the structural damage was caused by debris hurled against the buildings by the hurricane winds. Minimal direct damage from wave and wind was due largely to sea walls in strategic places as well as maximized floor heights and such defensive features as pressure relief vents which prevent explosions from the drastic change of pressure that occurs during storms.

River Walk Architect Robert H. H. Hugman Dies at the Age of 78



San Antonio architect Robert H. H. Hugman, father of the city's famed River Walk, died July 23 in San Antonio at the age of 78.

Hugman is credited with conceiving the original plan for the Paseo del Rio in the 1920s as a means of both beautifying the river and alleviating the threat of flooding.

To achieve the latter, the City had originally proposed straightening the San Antonio river between Olmos Basin and Gunther Mills and building a channel cut-off from Commerce to Villita Streets. To many San Antonians, however, the remedy seemed almost worse than the ailment. Objections to removing the meandering kinks in the river and carving out a concrete flood channel arose among those who feared such a project would desecrate the most picturesque part of the river downtown, known as the Big Bend.

Envisioning the Big Bend lined with sidewalk cafes, mariachi bands and shops, with gondoliers poling their boats through lily patches up and down the river, Hugman devised a plan that would beautify the flood channel, enhance the Big Bend section of the river and bring merchants to the riverside.

The idea was well received, but the ambitious project didn't get off the ground until the Depression, when the Works Project Administration with its legions of unemployed craftsmen and laborers, and Hugman as project architect, began work on the San Antonio River Beautification Project, all but com-

pleted in 1942.

In September 1978, installation of five bronze bells in the restored Arneson River Theater in honor of Hugman marked the fruition of his original River Walk scheme.

Hugman was a 1924 graduate of architecture from the University of Texas.

San Antonio Chapter AIA Presents 1980 Design Awards

Six projects have emerged as winners in the San Antonio Chapter AIA's 1980 Design Awards Program.

Excellence in Architecture Awards went to the firm Ford, Powell & Carson, and Chumney, Jones & Kell, for their joint venture design of a new library at Trinity University in San Antonio; Ford, Powell & Carson for renovation of San Fernando Cathedral in San Antonio (also a winner in TSA's 1979 Design Award's Program); and The Marmon Mok Partnership for design of the Medical Center Tower in San Antonio.



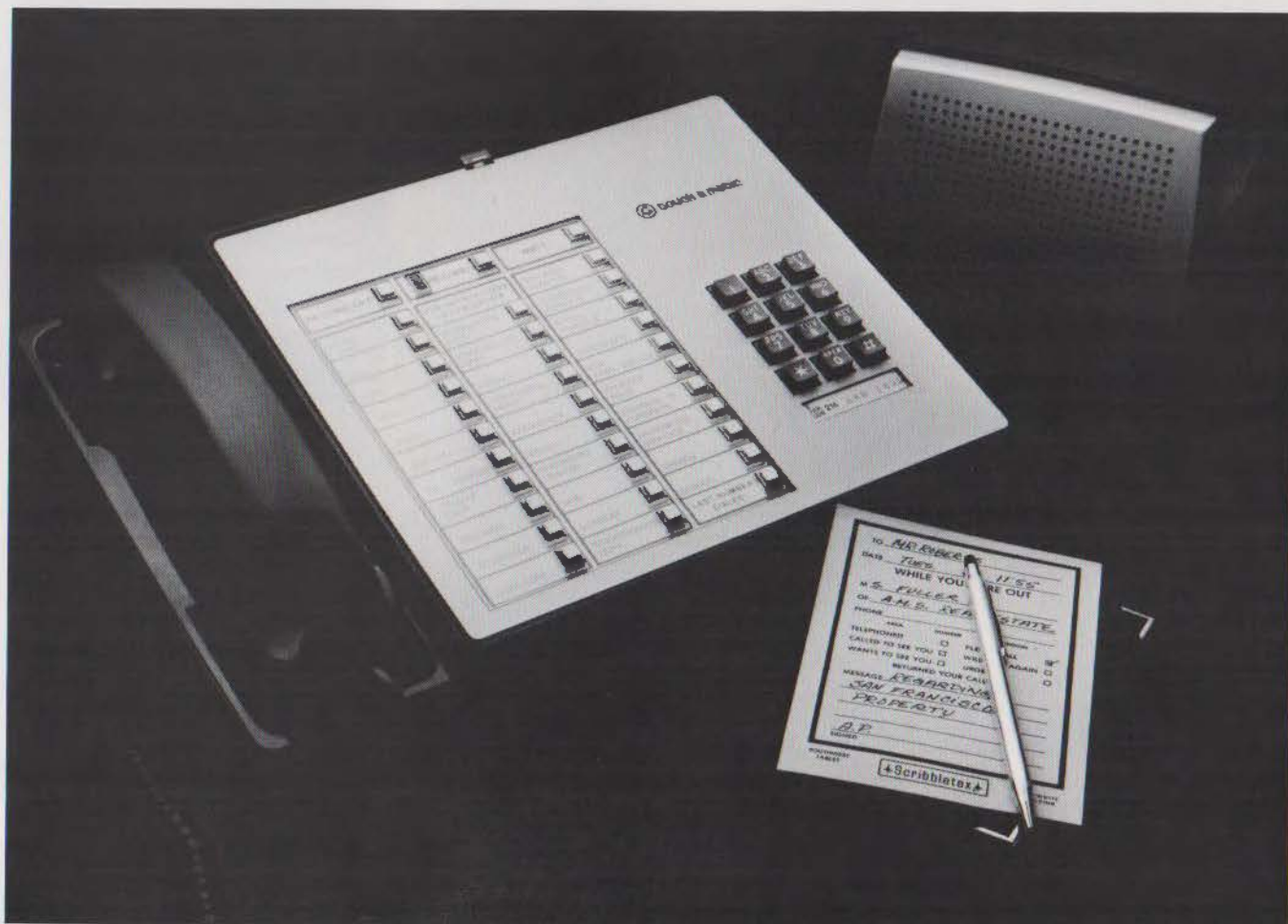
Trinity University library, San Antonio.



San Fernando Cathedral, San Antonio.

Merit Awards went to The Marmon Mok Partnership for the NBC Center drive-in bank in San Antonio; Chumney Jones & Kell for Windercrest Credit Union Center in San Antonio; and Ford, Powell & Carson for the Plaza Nacional Hotel in

YOUR NEW LITTLE BLACK BOOK



Everyone needs a little black book. A special place to keep the names and numbers of the people you call most often. An easy-to-use reference that saves you time during your busy work day.

Now let us show you our new little black book. The Touch-a-matic® telephone from Southwestern Bell. It's designed especially for you.

The Touch-a-matic telephone works just like a little black book — only better. It memorizes 31 of the local or Long Distance numbers you call most often — and dials them for you at the touch of a button. It also takes the hassle out of

busy signals by remembering the last number you dialed manually.

Add a Speakerphone to your new little black book and you have the convenience of hands-free calling. Listen and talk while you write, use your calculator, search files or move around your office. The Speakerphone can also make any call an on-the-spot conference call for everyone in your office.

To order your new little black book — the Touch-a-matic telephone — simply call us toll free at **1-800-442-7148, EXT. 624.**

It's the black book everyone needs.



Southwestern Bell

areonas



Edmund Kirk Associates

Dallas/1444 Oak Lawn, Suite 804, (214) 744-0696
Houston/3000 Richmond, Suite 130, (713) 520-6385

Circle 15 on Reader Inquiry Card



If you build homes for today's lifestyles, you need to know about Kent Moore Cabinets. We build space efficient, high quality Oak, Ash and Birch cabinets that rival site-built cabinets in both cost and eye appeal. With our wide variety of door styles, coordinating cabinets with the interior design is no longer a problem. Call us today and find out why more builders are using Kent Moore Cabinets.

Kent Moore Cabinets

3206 Longmire, College Station, Texas 77840 713-693-2906

Circle 14 on Reader Inquiry Card

In the News, continued.



Zimgraf

Medical Center Tower, San Antonio.

San Antonio.

Jurors for this year's program were Ehrman B. Mitchell, Jr., FAIA, former AIA president; James Pratt, FAIA; and Ralph Anderson, Jr., FAIA.

Austin Police Complex Chosen for 1980 Exhibit On Architecture for Justice

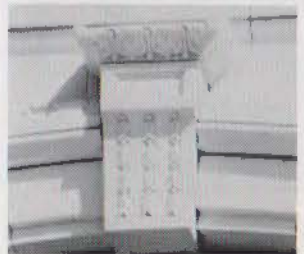
Expansion of the city police complex in Austin, designed in joint venture by the Austin firms Holt, Fatter, Scott, and Wilson Stoeltje Martin, was one of 19 justice facility projects nationwide selected for the 1980 Exhibition of Architecture for Justice Facilities, sponsored jointly by the American Correctional Association and AIA.



City Police Headquarters, Austin.

The projects were displayed at the ACA's 110th Congress of Corrections Aug. 17-21 in San Diego and at the International Association of Chiefs of Police convention Sept. 13-18 in St. Louis. The AIA Committee on Architecture for Justice also plans to display the projects at its juvenile justice seminar Oct. 30-Nov. 1 in Gainesville, Fla.

The selected projects, located in 14 states and Canada, include 12 correction/



Architectural Terra Cotta or Ceramic Veneer Call Great Southern Supply Company.

Whether you are refurbishing the old or creating the new. Great Southern can perfectly match existing ornamentation or precisely translate your design expression into architectural terra cotta of the finest quality.

It is the perfect medium for enduring architectural detail and ceramic veneer. And architectural terra cotta is available

in an almost limitless range of colors, textures, and shapes to satisfy even the most highly defined taste.

We have a thirty-five year reputation for providing the unique. Let Great Southern help you articulate *your* design statement. Call us today at 713/644-1751 or come and see our Houston showroom.



GREAT SOUTHERN SUPPLY COMPANY

P.O. Box 14507 • Houston, Texas 77021 • 713/644-1751
Houston Showroom, 3637 West Alabama at Timmons Lane
Suite 490 713/626-9172

Circle 16 on Reader Inquiry Card

detention facilities, three police stations, two judicial complexes, one U.S. Border Patrol station and one courthouse.

The projects were chosen by six jurors on the basis of aesthetics, adequacy of program, grouping of functional areas, accessibility, environmental controls, safety, site adaptation, site development and presentation of materials.

'Architect of Hope' Elected President of Peru



Peruvian architect Fernando Belaúnde Terry, a 1935 architecture graduate of The University of Texas and the man *Time* magazine called in 1965 "A Latin American

Architect of Hope," became the president of Peru in inauguration ceremonies July 28 in Lima.

According to the *AIA Journal*, Belaúnde is the only head of state in the world who is an architect by profession.

Belaúnde's July 28 inauguration ended 12 years of military dictatorship in Peru and marked Belaúnde's third election to the Peruvian presidency since 1963.

During his first term he actively promoted land reform, a national housing program and the Marginal Forest Highway, a 3,500-mile road carved through the jungle along the eastern foothills of the Andes to open up the wilderness for settlement and trade.

Many of Belaúnde's proposed reforms, however, were diluted by an opposition congress. Re-elected president in 1967, he was deposed a year later in a military coup, which sought to completely redefine Peru's still-flagging economy through revolutionary social and economic reforms.

Belaúnde spent the next 10 years in exile in the United States, teaching architecture, planning and foreign affairs at Harvard, Columbia, Johns Hopkins, George Washington and American universities.

In 1978, after the military junta in Peru announced plans to return the country to civilian rule, Belaúnde returned to Peru to run in the country's first national election since 1963. In a field of 15 candidates, he won 43 percent of the vote as candidate for the *Acción Popular* party, which he founded in 1956.

Continued on page 68.

Calling all Architects ... **THE GREATEST THING THAT EVER HAPPENED TO A WALL!**

TOWER is the contract vinyl wallcovering distinctively created and produced in design and maintenance, exclusively for commercial and institutional projects. 366 colors in 36 patterns of deep dimension textures for fabrics, cork, wood, grass, masonry, leather and more.

TOWER
CONTRACT VINYL
WALL COVERING

Offered exclusively in the state of Texas from the nation's number one distributor.

ISGO
CORPORATION

A full sales and service staff in Dallas and in Houston with warehouses containing quality wallcoverings.

Ken Deike
Commercial Division
ISGO CORPORATION
1237 Conveyor Lane
DALLAS, Tex. 75247
(214) 634-1313

Ed Tusa
Commercial Division
ISGO CORPORATION
5809 Chimney Rock
HOUSTON, Tex. 77081
(713) 666-3232

Circle 18 on Reader Inquiry Card

Waterproofing & Roofing

Rallton, Inc., carries a complete line of materials and equipment for roofing and waterproofing. Distributors for Bird & Son, Celotex, Johns-Manville, Gulf State Asphalt, Koppers, Supradur, etc. . . . state wide distribution . . . complete inventory . . . job site delivery

Rallton, Inc., (1-800-392-8526)
4053 Homestead Road / Houston 77028 / 713-676-7466
604 Carolina / San Antonio 78210 / 512-533-5023
613 S. West St. / Harlingen 79550 / 512-425-6631



Circle 17 on Reader Inquiry Card

Contract Design Center

Sixth Floor / World Trade Center / Dallas Texas



Nova Chair
Contract and residential furniture/lighting
Atelier International, LTD.
Space 608

Circle 81 on Reader Inquiry Card



"Haworth's Tri Circuit Uni Group. Beautiful, balanced, rugged and flexible."

Haworth, Inc./Dallas Division
Space 657

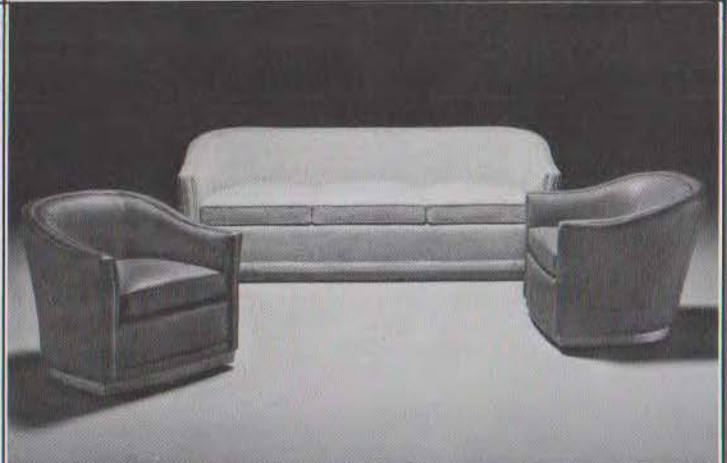
Circle 82 on Reader Inquiry Card



Seating, Desks and Conference Tables by:

Novikoff
Space 662

Circle 83 on Reader Inquiry Card



Aldo series by Jack Cartwright Inc. is available in chair, love seat and sofa.

W. Glenn Hennings & Associates
Space 605

Circle 84 on Reader Inquiry Card



Open Plan Systems by Westinghouse ASD

Westinghouse ASD
Space 679

Circle 85 on Reader Inquiry Card





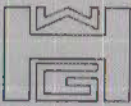







Contract furniture by Sevacraft, available from:










Endecor
Space 610

Circle 86 on Reader Inquiry Card

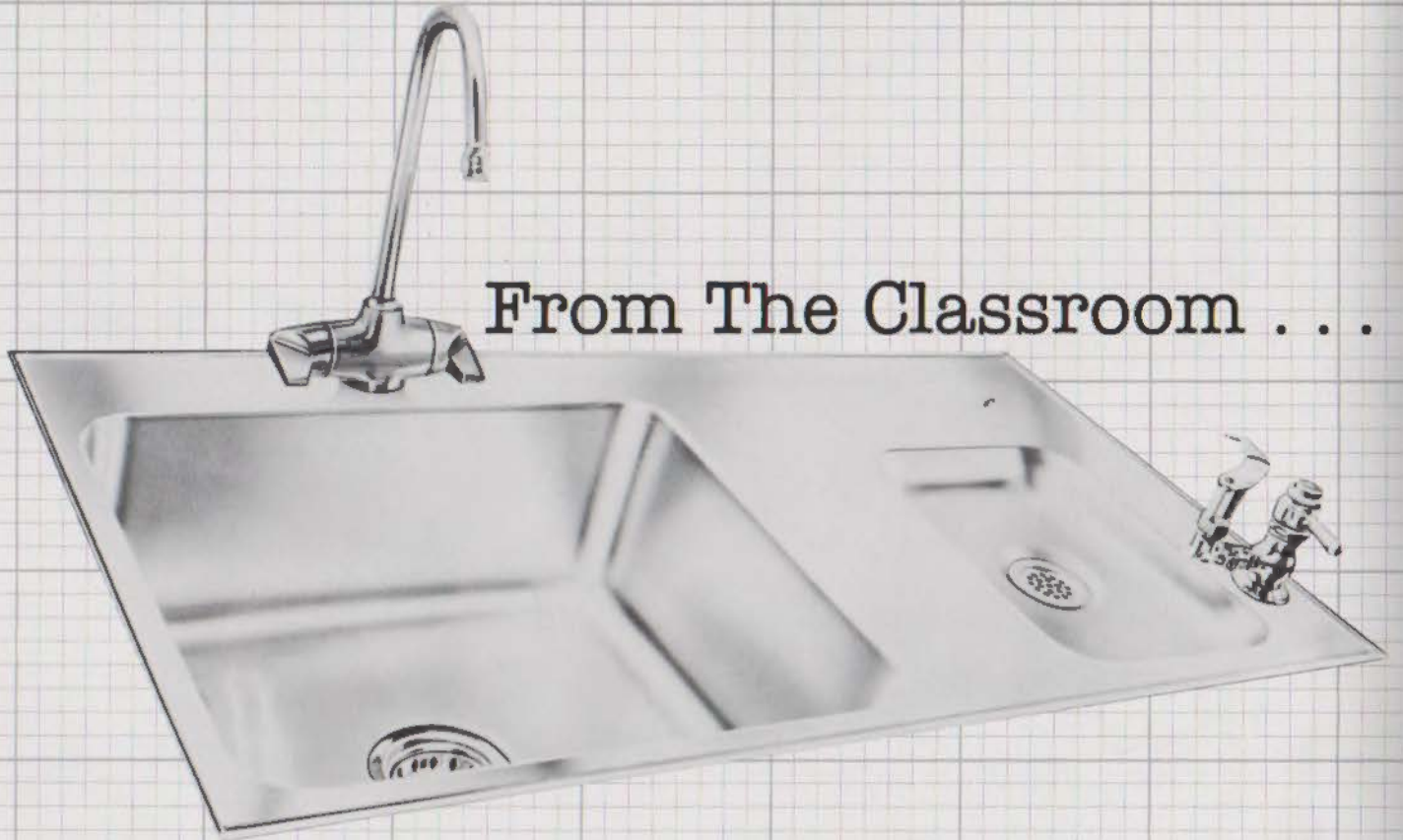
Contract Design Center / Sixth Floor

| | | |
|--|---|--|
| <p>Space 600</p>  <p>THONET 214/741-2271</p> | <p>Space 609</p>  <p>herman miller 214/741-4937</p> | <p>Space 623</p> <p>Armstrong, American of Martinsville, Fabricut, Seabrook Wallcoverings, Sico, Simmons and many more.</p> <p>Turn-Key Furnishers Houston & Dallas</p> <p>Bill Chattaway Associates 214/651-0845 713/960-9538</p> |
| <p>Space 604</p> <p>Nemschoff, Precision, Charlotte, Omini, Artopex, Fine Arts, P.T. & C., Elevations/Design</p> <p>MARLBOROUGH & LORD ASSOC. 214/748-3051 713/974-4468</p> | <p>Space 610</p> <p>Contract and Institutional Furniture</p>  <p>Endecor 214/748-0394</p> | <p>Space 638</p> <p>Chromcraft Furniture 214/748-2706</p>  <p>a Mohasco company</p> |
| <p>Space 605</p> <p>Contract Furniture, Accessories and Lighting</p>  <p>Glenn Hennings & Associates 214/651-1556</p> | <p>Space 611</p> <p>Representing Jansco, Contemporary Shells, L.S.I., Terfeste, Ltd., Salvarani Kitchens, Paul Hoppenfeld, Desience Corp., Lomac Marble, Coeval Contract</p>  <p>ernest low & associates 214/747-8839</p> | <p>Space 642</p> <p>Monarch Furniture 214/741-5347</p>  <p>a Mohasco company</p> |
| <p>Space 608</p> <p>Furniture, Lighting, Art & Accessories</p>  <p>Atelier International, Ltd. 214/653-1161</p> | <p>Space 616</p>  <p>William Hammon & Associates 214/745-1371</p> <p>Commercial & Institutional Furniture</p> <p>Showing: Brickel Associates CI Designs David Edward, Ltd. Modern Mode, Inc. and others</p> | <p>Space 645</p> <p>Representing Hiebert, Brueton, Gilbert, Rudd, Business Accessories</p>  <p>john alberti inc 214/747-2431</p> |

World Trade Center / Dallas Texas

| | | |
|---|---|--|
| <p>Space 646</p>  <p>Van Sant, Inc. 214/747-4376</p> | <p>Space 662</p> <p>Seating, Desks, Conference Tables</p>  <p>Novikoff 214/748-1976</p> | <p>Space 670</p> <p>Contract Furniture, Lighting & Accessories</p>  <p>I. H. Pritchard, Inc. 214/741-5097</p> |
| <p>Space 650</p> <p>Open Office Systems Contract Furniture</p>  <p>American Seating 214/748-8383</p> | <p>Space 664</p> <p>Harter, Croydon, R-Way, Carolina Seating, Samsonite</p> <p>Jim Jackson Associates 214/742-9746</p> | <p>Space 676</p>  <p>Knoll International 214/741-5819</p> |
| <p>Space 657</p>  <p>HAWORTH OFFICE INTERIOR SYSTEMS</p> <p>Haworth, Inc. Dallas Division 214/748-0506</p> | <p>Space 666</p> <p>Domore, Gregson, Continental Woodcrafters, McGraw Edison, Corry Jamestown, Color Shops, Gift Craft, Hoosier</p> <p>Loyd Brotherton & Assoc. 214/742-3654</p> | <p>Space 679</p> <p>Open Plan Office Systems</p>  <p>Westinghouse ASD 214/744-5685</p> |
| <p>Space 660</p> <p>Harvey Propper, Inc., Taylor Chair Co., Davis Furniture Industries, Office Specialty, Ltd.</p>  <p>Bob Gray, Inc. 214/747-6361</p> | <p>Space 668</p>  <p>Metro</p> <p>Metropolitan Furniture Corp. Robert Long Lighting, Inc. Helen Webber / Heron Intl.</p> <p>Metropolitan Showrooms, Inc. P.O. Box 58256 Dallas, Texas 75258 (214) 747-4135</p> | <p>Interior products for the architect, specifier and interior designer</p> <p><i>For further information on any of the showrooms listed in the ad, please circle the reader inquiry number. If you would like information from a specific showroom, please indicate so on the reader inquiry card.</i></p> |

Just[®] Stainless Steel Sinks



From The Classroom . . .

To The Kitchen



[®]Just Manufacturing Company

Hugh M. Cunningham

Manufacturers Representative

DALLAS: 4309 N. BELTWOOD PARKWAY • 75240 • 214 • 661-0222

HOUSTON: 1999 KOLFAHL • 77023 • 713 • 923-2371

SAN ANTONIO: 5130 SERVICE CENTER • 78218 • 512 • 661-4161

Circle 20 on Reader Inquiry Card



About this Issue

Rick Gardner: Kennard House, Gonzales, 1895.



In a 1933 edition of *American Architect*, one Leopold Arnaud wrote, "Building beautifully is the expression of the art of living, and so long as living is an art, it (building) will probably make use of the crafts." *Probably?* Rather than an affirmation of conviction, this was more an expression of hope—a wish in anticipation of a swing away from the then-prevalent Modernist dogma against ornament and embellishment in buildings. Arnaud bemoaned the "nudity" of the International Style, the unadorned blandness deriving from an aesthetic of functionalism and pure form. Observing that craftsmanship in architecture is displayed principally in ornament, he extolled hand-crafted embellishment as the key to a more florid and acceptable architectural expression.

As evidenced by Michael Benedikt's ambitious essay in this issue, the absence of craftsmanship in buildings still is being lamented, but on somewhat broader grounds than the mere lack of ornamentation. True to Arnaud's hopeful predictions, architecture of the Modern Movement has become somewhat disfavored, but not entirely because of its sleek and unembellished form. Peter Blake observes in *Form Follows Fiasco*, "The underlying premise of building in the International Style—the premise of sheerness, flatness, smoothness, unornamented plainness—remains, to this day, an impossible dream. Impossible, for the simple reason that the facts of building in the real, outdoor world—the facts of such mundane problems as weathering and maintenance—make it virtually impossible to attain the ideal of a flawless architecture of pure geometric forms." One suspects, however, that the failure to attain the ideal has had as much (or more) to do with shoddy materials and poor workmanship—a lack of craftsmanship in the sense of "giving a damn" during the process of building.

As for ornamentation, *post-modernism*, in a sense, has proven to be Arnaud's false hope. Ironically, much of the work being labeled as *post-modern* reflects a concern for ornament and historical allusion while displaying a certain flimsiness unlikely to be associated with craftsmanship.

Whether it appears as ornament and embellishment, or in the informed use and assembly of materials, craftsmanship in building is a rare and valuable commodity. It is rare because of the Machine Age breakdown of the day-by-day passing on of skills and tradition, begun in medieval times. And this rarity itself makes craftsmanship valuable, usually the product of sacrifice in an economy reeking of crude indifference to the arts.

In its highest form, craftsmanship reveals evidence of care, of joy in one's work. From the unique touch of a human hand, it bears the precious mark of individuality. It is the making—beyond all words—of things seen within the mind. And in its inherent quality of imperfection, so unlike the absolute precision of machines, craftsmanship reflects the true nature of living; it somehow brings buildings to life. —Larry Paul Fuller

Human Presence in the Quality of Buildings

By Michael Benedikt

Attitudes toward craftsmanship in architecture tend to be polarized. Some claim that craftsmanship in an age of advanced technology, mass production, and component assembly is an anachronism, at best a hobby. Others almost mystically revere craftsmanship as an antidote to the impersonal and standardized products and tasks of our time.

Historically, allegiances toward these conflicting views have shifted from one to the other and back. "For" craftsmanship: the arts-and-crafts movement of the late 19th century, Art Nouveau, American architects like Sullivan, Wright, Greene and Greene, and the recent "handmade house" craft renaissance. "Against" (in the sense of being opposed to labor-intensive and antiquated building methods and materials): architects of the International Style such as Gropius, Mies van der Rohe or S.O.M. The former might be labelled romantics or medievalists, the latter functionalists or rationalists. These categories are deceptive of course; "for or against" is too simple a dichotomy to begin to analyze the complex matter of modern architecture's relation to craftsmanship. Nevertheless, a certain tension between the two opposing views seems to characterize arguments about the beauty, humanness and rationality of the whole design and building process.

Before looking more closely at the significance of craftsmanship, we had best define craftsmanship a little more clearly. I would suggest that it is best to think of craftsmanship as a *spectrum* of activities from, say, violin-making to stone-laying. The common feature here is the *intelligent, non-automated fabrication of material objects in small quantities and with individual variation to suit circumstances*. Some of the variable features in the spectrum would be: the origin of the design—whether it represents a tradition

of like objects and/or a request made by a designer; the craftsman's manner of working—whether as independent producer, or commissioned or salaried worker; the degree of training and level of skill required; and the degree of understanding of the whole task. In this way we may include "fine workmanship" in our thinking about craftsmanship; for fine workmanship, more often than not, describes what architects mean by craftsmanship in the making of the building *per se*. (Alternatively, we may wish to distinguish "building craftsmen" and craftswomen—such as plasterers, joiners, glaziers, and masons—from "art craftsmen"—such as weavers, potters, and bottle blowers.)

CRAFTSMANSHIP AND BUILDINGS

What, then, is the significance of craftsmanship in the design, construction and use of buildings? Leaving aside for now the issue of the origin of the design, two primary relationships exist in the production and use of an artifact such as a building: 1) the relationship of the user/owner to the made object, and 2) the relationship of the craftsman/maker to what he makes.

Regarding the first relationship, there is an argument which goes as follows: The evolution of production techniques by bare hands through tools, to machines and higher levels of automation—from one-of through mass production—has been continuous, unstoppable and, in a sense, natural. High technology, mass production, and rapid component assembly are today's craftsmanship. All these processes require some care and skill. After all, if something useful is well made—an ash-tray, a window, a car—why should it matter *how* it was made or by whom, by automated machine or by hand tool, in a second or in a week? Given a good master design to begin with, all that matters are such qualities

as cost, durability, and so on. In this respect, a building should be viewed like any other object—a chair or a piece of flatware. This last assertion I will return to.

One's ability to be happy with the prior argument depends on holding either one or both of two beliefs: 1) that the value of an artifact to a user does not properly include the good or harm done to people or environment during the process of manufacture, or 2) the belief that the free enterprise economic system reflects and adequately compensates the pains, difficulties, and costs of manufacture. For example, redwood is a beautiful building material—light, easy to cut, weather resistant, insulating, good-looking. It is not plentiful, so its high price is justified and "correct," and—so the argument goes—we need not concern ourselves with the actual magnificence and irreplaceability of the trees felled. Similarly from this viewpoint, in deciding the extent to which a building is to be put together from standard parts and with undemanding construction methods (and hence with little craftsmanship), the architect would be somewhat sentimental and foolish to consider not only the source of the materials, but the environmental conditions under which the builder builds, his human reasons for building at all or the values propagated by the building tasks that are set. The builder too, after all, is keen to get it over with and get paid.

Why then does "craftsmanship" still have such positive connotations? Can the view above be countered? What is it about the craftsman's relationship to his work (our second primary relationship) that is noteworthy?

The *sine qua non* of craftsmanship, of course, is the craftsman's understanding of his material. Much of his art lies in his eye for the quality, inner structure, surface character and potential for ma-

Interior vault detail, Kimbell Museum, Fort Worth, by Louis Kahn, 1972. Associate architect: Preston M. Geren & Associates.



Phillip Poole

nipulation of particular pieces of raw material, as when a master mason chooses rocks of marble from a quarry, examining their cracks, color, veining and proportions, or when, turning a piece of fieldstone over and over, the stonemason lets the stone decide where it wants to go. Because the craftsman is apt to work with materials that are not highly pre-processed, and because of the attention he must pay to their quality and rarity, he is able—with his measure of creativity—to respond adaptively, economically and responsibly to his sources and to appreciate their intrinsic value. Yet these considerations do not explain the underlying appeal of craftsmanship, which has more to do with the nature of the vocation of *craftsman* itself, and our perception of the crafted building (or object) on account of it.

What is it about a vocation that gives satisfaction? Freedom, dignity, expertise, affiliation and identity, perceivable results—these are some of the most important things: freedom (within accepted limits) to exercise choice in the manner and timing of one's performance; dignity, self-esteem, and confidence in the worth of one's labor and its overall purpose; an affiliation with others who do similar work and a personal identity relative to that group; the feeling of one's own competence, expertness, or adroitness in accomplishing a task most find difficult; and seeing the results of one's efforts clearly, tangibly, and in good time. Few, indeed, are the vocations that offer these satisfactions; fewer still the work situations that realize them.

The craftsman, even the fine workman, can realize these potentials quite readily. Perhaps this phenomenon explains why, in a period which emphasizes the importance of a fulfilling lifestyle, so many young people are turning to craft as a vocation; why the bookstores are filled with manuals and glosses on carpentry and pottery; and why, perhaps, even the profession of architecture (the architect being perceived as a supercraftsman in an age of dream peddlers and paper pushers) is receiving new attention and burgeoning school enrollments despite scant chance of substantial financial reward.

The value of craftsmanship arises, then, not only from its rarity in the built environment but from its capacity to symbolize civility and creativity in direct contact with material reality. There is even some envy of the craftsman—and hence, perhaps, a desire to possess crafted



Pam Meadows



products—on the part of people whose work neither requires vision and hand-mind coordination nor produces tangible products whose quality is evident. The craftsman is thus both dreamer and maker, artist and laborer, depending not on power and persuasion but on skill and reputation—a model of meaningful work. Of course, no craftsman you or I know is likely to fulfill this ideal. But it is this ideal, this myth, if you will, which lends its power to the crafted object.

I have not argued for the *beauty* of the crafted object over the industrialized object. Such a case no longer can be made. The best examples of building craftsmanship, say, Japanese Buddhist temples, are no more or less beautiful than the Yamaha motorcycles that pour off the assembly line nearby, no more or less beautiful than many of the fine machine-tooled buildings of Arata Isozaki. The machine-made object reminds us of its automated birth and heritage, and may very well be beautiful on just that account. (Machine-made imitation handwork is too wretched to discuss here). The hand- or tool-crafted object (or wall or ceiling), by the same token, tends to look *made* and to display the human touch wherewith it was made in the struggle for perfection. Even when an object looks industrially machine-produced and we learn that it is in fact a singular hand-crafted piece (as is often the case with prototype furniture and certain pieces of modern art) the integrity, indeed heroism, of the effort combines with the dispassionate perfection of the result to imbue it ten-fold with value and significance. No, differences in *degree* of beauty do not distinguish handcrafted from mass-produced articles, and one must be beware of setting examples of good industrial design against poor examples of craftsmanship, and vice versa, which people often do. The difference lies in the *quality* of that beauty in rela-

Leslie Bland



Phillip Poole

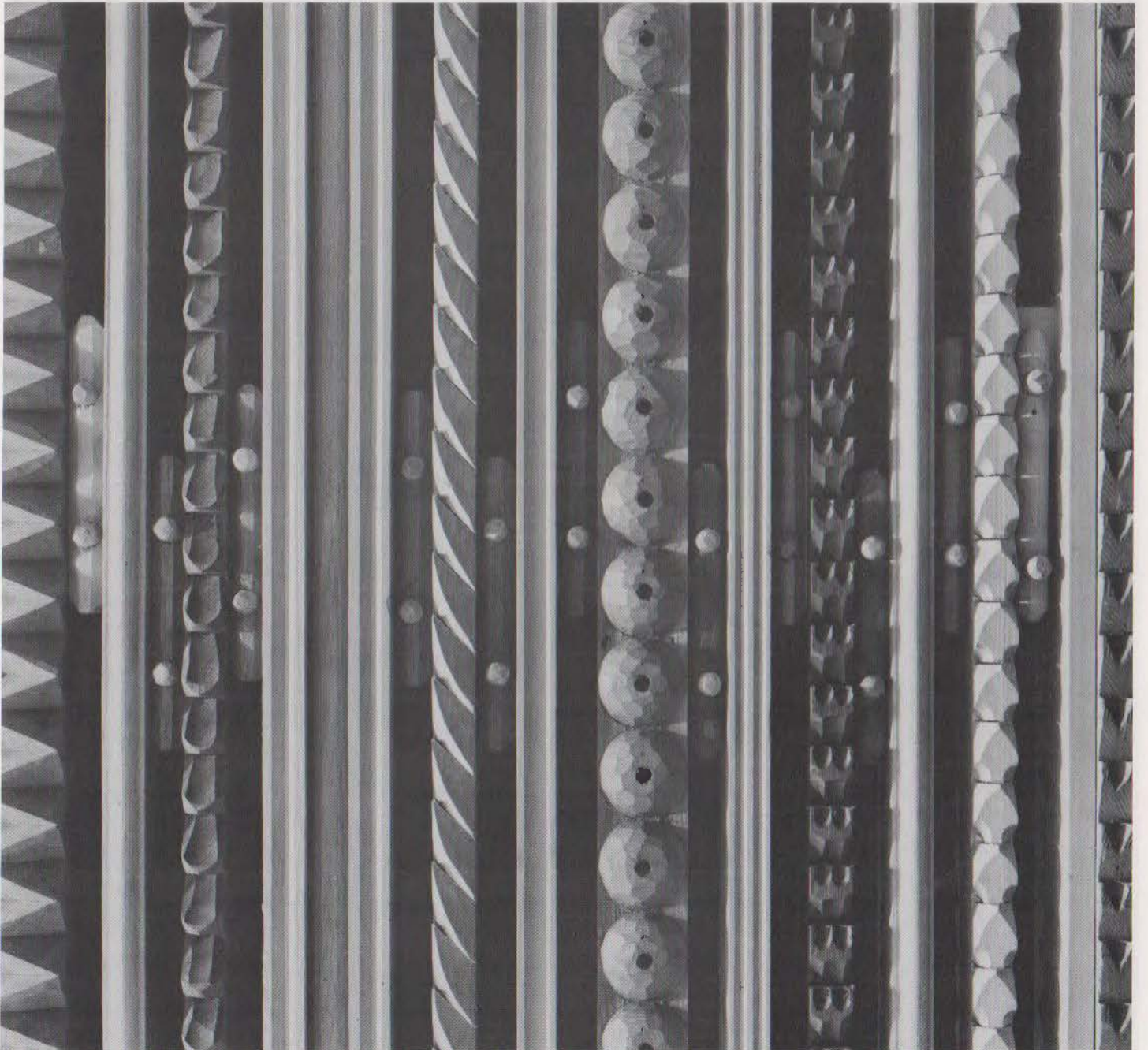
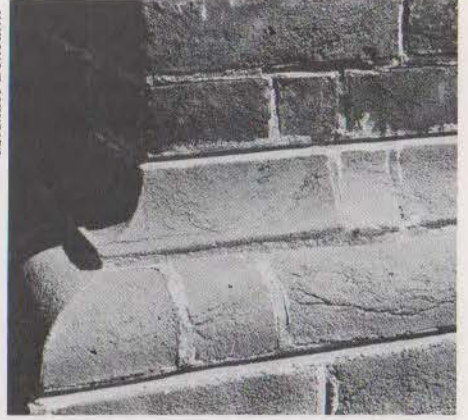


FROM TOP LEFT: George Astié, Astié Art Metal Studio, Dallas; R. M. Reagan, stonemason, with replacement columns for Tips Building restoration, Austin; Lynn Forá, late brother of O'Neil Ford, with hammered lead panel, San Antonio, 1965; mason craftsmen, Fort Worth (Local #11).

Bob Mayette



Michael Benedikt



TOP, LEFT TO RIGHT: Carved board wall by Lynn Ford, Skidmore College, New York; ironwork detail, Astié Art Metal Studio; plinth detail, Carpenters Hall, Philadelphia. ABOVE: Detail of carved stick screen by Lynn Ford, U.S. Pavilion, San Antonio.

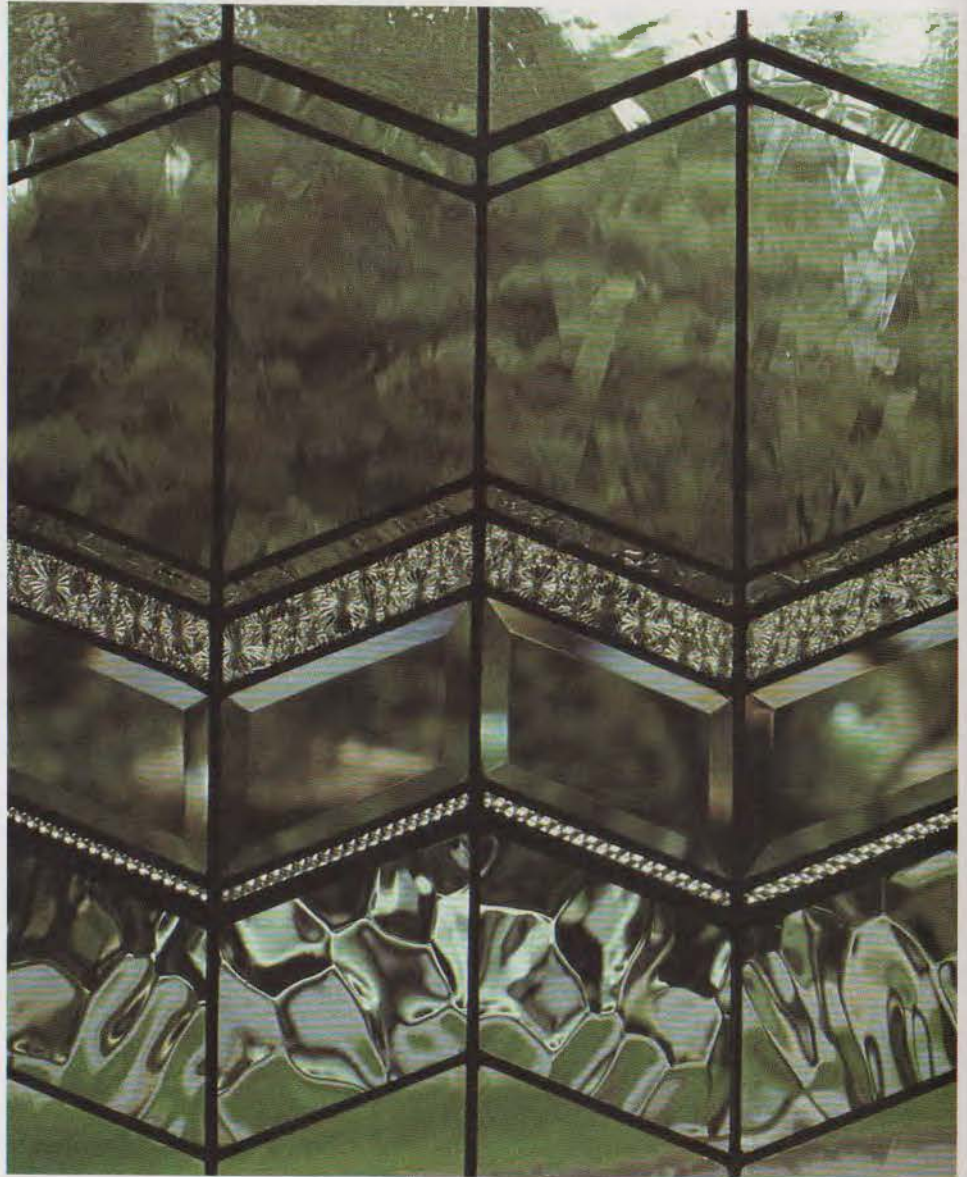
tion to the human experience.

On the slightly lower plane of fine workmanship, a similar distinction holds. When the workman assembles, connects, and molds things automatically, indifferently, and unheeding of the "will" of the parts and the circumstances, the results look violent and slapdash (even if the original design is good). When the workman cares about the whole and his stake in it, when he works with precision, skill, and sensitivity, the results speak to us of his care and individual attention. Even if the original design is pedestrian, this quality, what Robert Pirsig called "Quality," (*Zen and the Art of Motorcycle Maintenance*) will prevail. As we read the arguments back and forth from Ruskin, Morris, Garnier, Le Corbusier, Mumford, and many others today, we find that the almost mystical ingredient of "humanness"—not beauty—is the motivating issue for all the supporting talk of form and function and truth.

Near the outset we broached the issue of whether a building should be viewed as just another product of industry—a chair or a piece of flatware—and whether, therefore, it does not need whatever qualities the crafted object uniquely has. Certainly the pioneers of the Modern Movement had no problem with thinking of architecture as an industrial/technical problem and of architectural design as being continuous with industrial design. Or did they? Consider the shock value of Le Corbusier's dictum "... a house is a machine for living in." Living *in*? This was new. Living *with* machines, using them like commonplace utensils, such as ploughs or can openers, was O.K.

Chaplin, in *Modern Times*, lived *in* a machine for a while, passing from cog to cog, up moving belts (ramps?) and down. But houses that are machines for living in tend to be houses for machines *to* live in. The awful anonymity of mass (-produced) housing, the changes wrought upon Le Corbusier's own Pessac housing scheme, the need for humans to lay hands on their environment (in the absence, perhaps, of a previous caring touch)—these are well known now. Throughout history the greater part of craftsmanship has had to do with dwelling, from pottery through weaving to the building itself. While weaponry and utensils were the first to be industrialized, architecture resisted till the last, and resists in some measure still. Perhaps, then, buildings are unique—environments, and not just things. Perhaps we simply have different places in our hearts for the tools we use and for

Detail, leaded glass door panel, by Renaissance Glass Co., Austin.

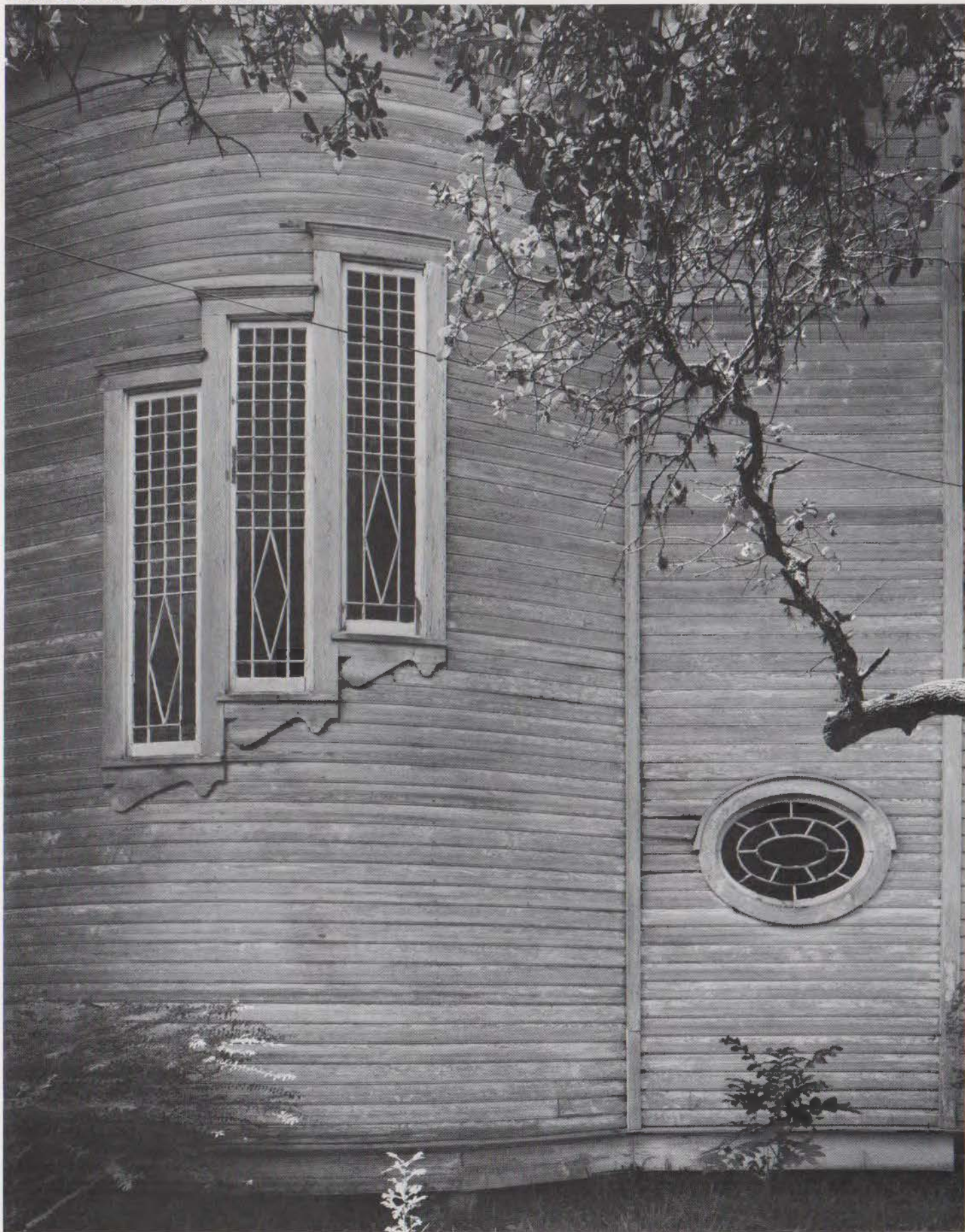


Crystal Cathedral, Garden Grove Community Church, Garden Grove, California, by Johnson/Burgee, Architects, 1980.



Richard Payne

Facade Proctor-Green House, Cuero 1890.



Rick Gardner

the places in which we dwell.

In what sense is the architect a craftsman? Few architects today have had extensive "hands-on" experience in the process of building (though, with maturity, they may direct and specify work to be done) such that they can be regarded as having served an apprenticeship. By contrast, most major sculptors, though craftsmen and workmen actually execute their work, once had to do so themselves. The workman functions as the architect/artist's hands, the craftsman as part of his mind, too. Frank Lloyd Wright's craftsmen, for example, were forgotten until a recent book by David Hanks:

"The debt which we owed clever craftsmen who, to their eternal credit, understood in those unobtrusive days of house furnishing what he was driving towards, must be acknowledged."—*The Decorative Designs of Frank Lloyd Wright*.

Most directly, however, the architect's craft consists in his drawings and models. These are what he makes uniquely and what the sensitive architect instinctively lavishes his attention upon. (Perhaps the recent resurgence of interest in architectural drawings for themselves is part of the larger positive feeling about craftsmanship in general.) His buildings as such are vicarious craftsmanship.

Untrained as a craftsman, the architect nevertheless can call forth craftsmanship and fine workmanship by several means:

- Most obviously, by "designing in" traditional crafted components—stairs, paneling, cabinets, decoration.
- By calling for construction that requires care and skill and that demonstrates the results.
- By establishing personal working relationships that respect and reward excellence with workmen, craftsmen, and certain contractors, both on a given job and over the long term.
- By ensuring that those who construct a building are led to understand the intentions behind the design and the nature of the total project.
- By having his own craft—his drawings and models (and even specifications)—serve as examples of quality and artistry.
- By making construction (and design) activity part of the public consciousness—identifying builders by name, seeking community input physical and psychical, celebrating groundbreakings and roof topplings, giving progress reports.
- By showing clients, when necessary, the need for and worth of expenditure

Entrance porch, house in Cuero.



Rick Gardner

BELOW, LEFT: Sitting room, Ross House, Brenham, 1893. BELOW, RIGHT: Balcony, Wood House, Brenham, 1897.



Rick Gardner



Rick Gardner

Detail of east facade, Battle Hall, University of Texas at Austin, by Cass Gilbert, 1910.



Bill Kennedy

on quality materials and workmanship, both from the investment point of view, and for the good done all people involved with the building over time.

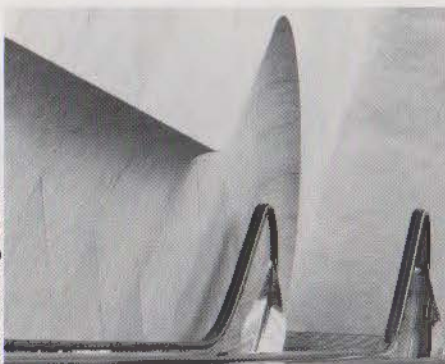
Does all this imply that every new building ought to be layed, hewn, carved, and decorated from wood, stone, and plaster, at enormous expense? Not at all. I have tried to make a case for fine workmanship that is continuous with true hand-craftsmanship. Nevertheless, the building industry being what it is (that is, having found that set of least actions that will make an acceptable building), good craftsmanship, good workmanship, and good design cost "extra" money, almost inevitably.* Two recent buildings illustrating my point—both in terms of the significance of craftsmanship and the seven points above—are expensive, institutional buildings devoted to the arts. They are I. M. Pei's East Wing of the National Gallery in Washington, D. C., and Louis Kahn's Kimbell Museum in Fort Worth.

As you know if you have visited the East Wing, the sense of space and light and human movement in the building is quite impressive. The configuration of skylit atrium and forty-five degree "zoots," blank walls, and long spans, however, is a rather common design feature of countless new banks, malls and certainly earlier Pei buildings, and therefore not entirely original. But the workmanship, the craftsmanship, the detailing, color, precision, care, and tactile quality of the impeccably chosen materials are unprecedented in this style of building and cumulatively overwhelming. It took eight years and \$19.4 million (\$160/sq. ft., 1978) to build. The Kimbell is a more modest and in many ways better building. Here the care in the concrete work, the expression of joints, the marble, the wooden doors all give just embodiment to the grace of the design (\$54/sq. ft., 1972).

If these are very special buildings, then let them be modern exemplars. History has many others to show us. But it should be remembered that every building done by an architect is already a special building, if only because so few buildings are done by architects. Specialness in a building happens every time the architect puts a little more thought into the detail construction, or when the client sets high standards, or when the builder forgoes a shortcut—but especially when the three together agree, however tacitly, that craftsmanship and fine workmanship are an intrinsic aesthetic, social, and even economic good.

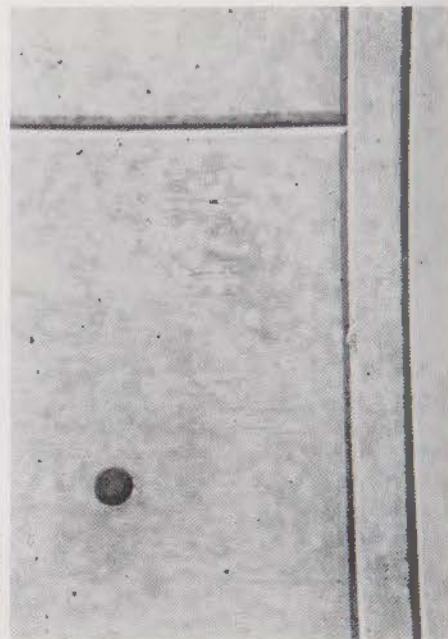


Esra Stoller © ESTO



Esra Stoller © ESTO

ABOVE: Wall shaped to contours of East Wing escalator. RIGHT: Exterior concrete seam, Kimbell Art Museum.



Phillip Poole

Vault corner columns, Kimbell Art Museum, Fort Worth, by Louis Kahn, 1972. Associate architect: Preston M. Geren & Associates.



Phillip Poole

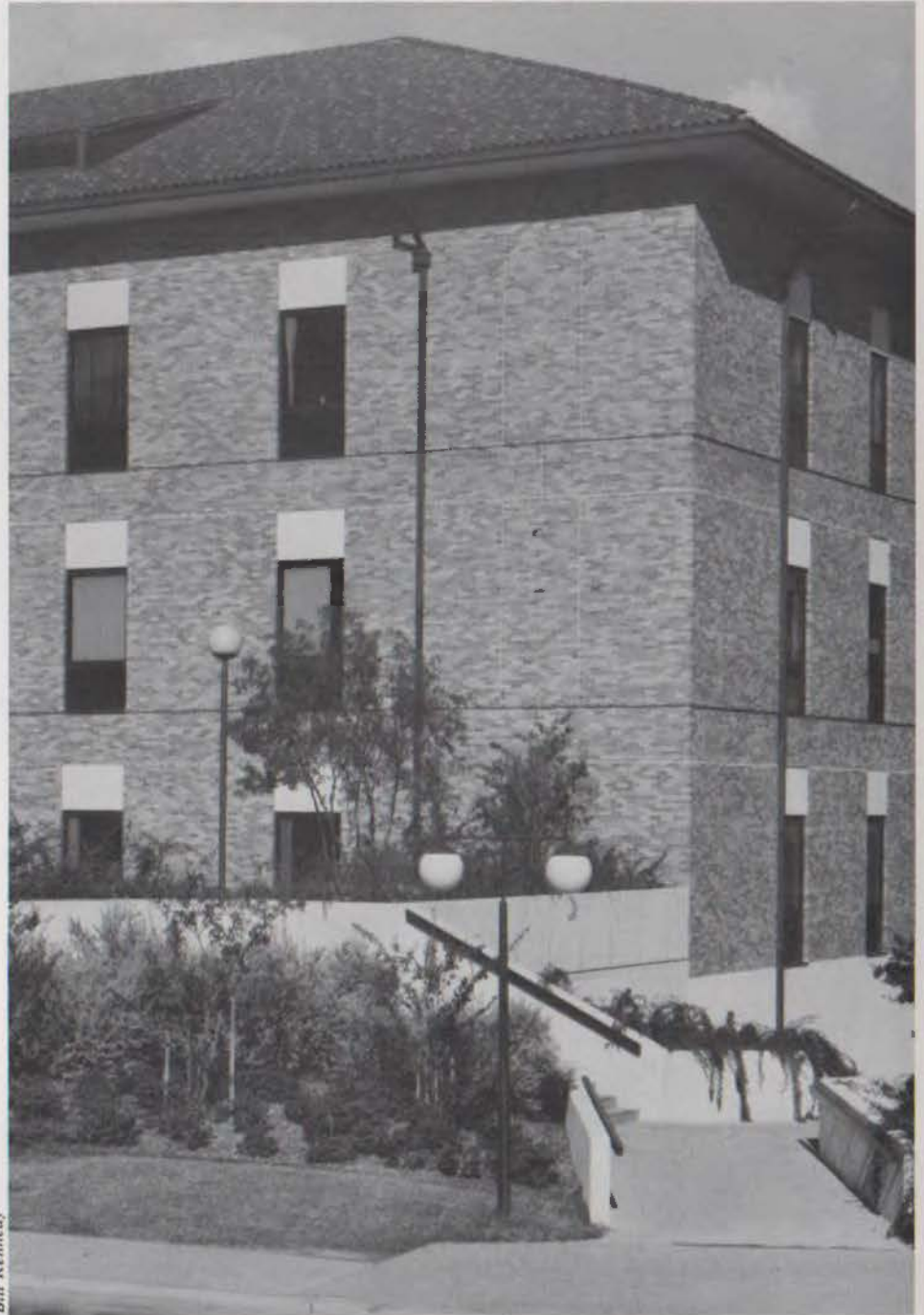
CRAFTSMANSHIP AND ARCHITECTURAL EDUCATION

What of the implications for architectural education? One frequently hears complaints of the ignorance of recent graduates about the specifics of the craft of building. This is often ascribed to an overemphasis on non-practical matters at school—social science, ecology and so on. If the 1975 exhibit of drawings from the École des Beaux-Arts at the Museum of Modern Art set Post-Modernism on course, and if Post-Modernism permeates the schools as it is beginning to do, then we should not look forward to any improvement soon. When the Ecole was at its height, the view was widespread that its students understood only the making of drawings and special effects, that “the constructional studies made by students at the Ecole des Beaux-Arts had no relationship to their design projects.” (Peter Collins in *Changing Ideals in Modern Architecture*.) As had most architects before him, the Beaux-Arts architect depended heavily on the traditional knowledge and skills of a great variety of profit-making craftsmen and workshops.

It is interesting to note that Auguste Perret, teacher of Le Corbusier and pioneer of reinforced concrete construction, who was known for the extraordinary craftsmanship of his buildings, was one of the few students at the Ecole whose father was a building contractor (whom he later joined). Mies van der Rohe’s initiation to craftsmanship also came from his father, a master mason. Mies later apprenticed himself for two years to Bruno Paul, a leading furniture designer, having learned to draw while designing stucco decorations. Gaudi came from a family of coppersmiths and worked in an ironwork shop as a student. Bernard Maybeck, son of a woodcarver, was apprenticed first to another woodcarver, then to a furniture designer in Paris where he entered the Ecole des Beaux-Arts. The Greene brothers graduated from the Manual Training High School in St. Louis before going to MIT. Louis Kahn’s father was a stained-glass craftsman. And the close working relationship of O’Neil Ford to his craftsmen and his craftsman brother Lynn is well known. I suspect that many of this century’s architects known for the craftsmanship of their buildings have had a strong craft-oriented training prior to, alongside, after, or instead of, their schooling in academic architecture.

With the coming of industrialization

Welch Hall, University of Texas at Austin, 1978, by Wyatt Hedrick.



Bill Kennedy

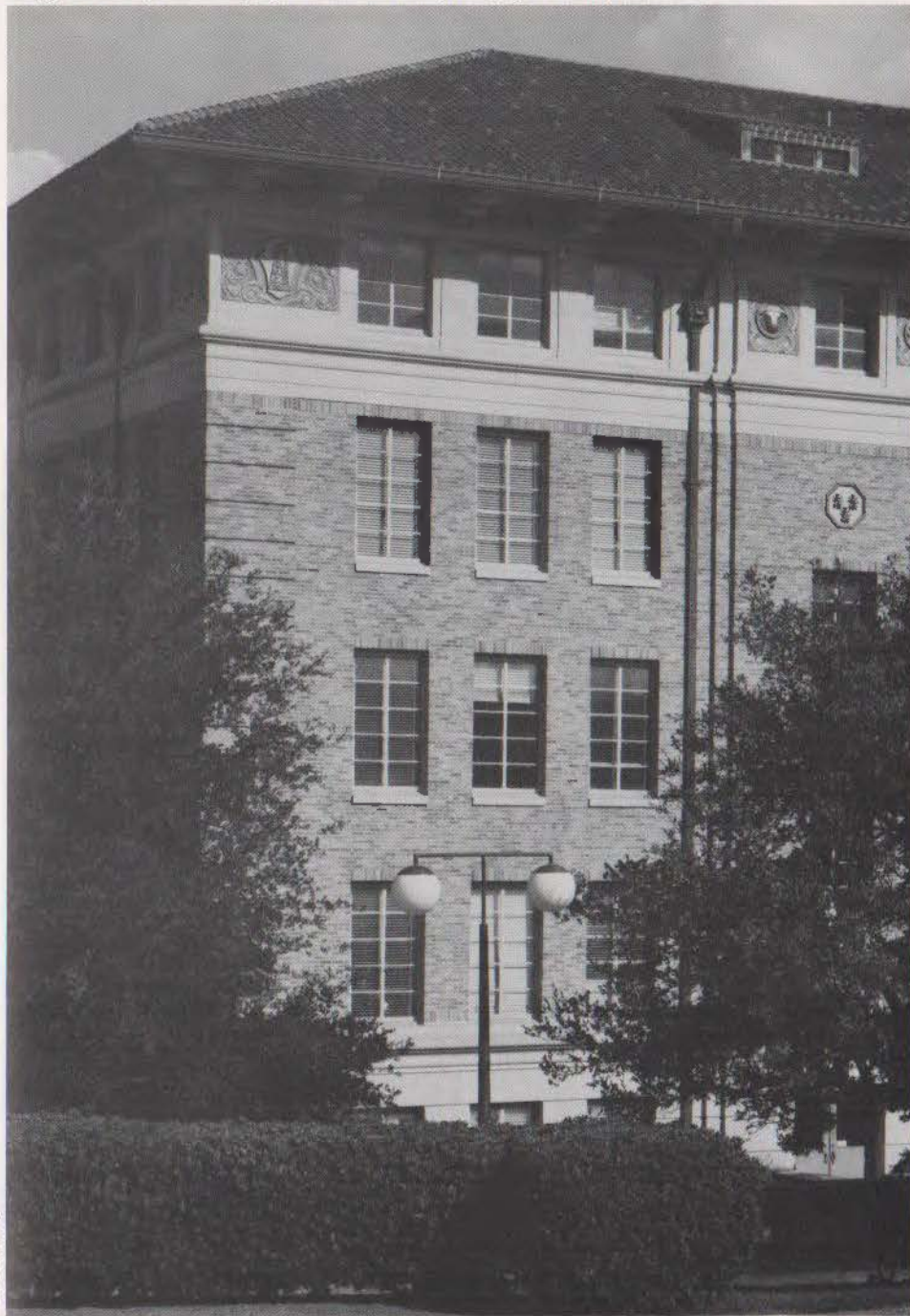
to building tasks of greater scope, speed, and social relevance, and with the slow disappearance of building craftsmen, the early Bauhaus took it upon itself to train architects and designers in the crafts. The aim was not to hand-build the world but to create humane industrial products and industrially produced environments through design informed by first-hand knowledge of a variety of materials and crafts. There are no schools now that follow the early Bauhaus model with anything like its original artistic, “hands-on,” socially conscious rigor and spirit—even

though such a program is perhaps the only means, save apprenticing with fine builders and craftsmen, by which a student can grasp the principles, attitudes, and specifics required to give buildings aesthetic, material existence by whatever constructional system.

CRAFTSMANSHIP AND THE FUTURE

Finally, there seems to me to be two paths that architecture is traveling, one demanding craftsmanship, the other not. On the one hand we have the phenomenon of young design/build architects

Waggener Hall, University of Texas at Austin, 1931, by Greene, LaRoche & Dahl.



Bill Kennedy

doing generally small energy- and resource-conscious architecture—such as the work of David Sellars and Louis McCall (ex-Yale, the only M. Arch Program with a yearly real-building construction project)—for whom “old-time” craftsmanship is a matter of faith as well as style. And there are growing ranks of preservation and restoration architects for whom knowledge of, and access to, craftsmanship is a hard-nosed requirement.

On the other hand we have both the burgeoning Post-Modern movement with

its painted sheetrock and tile conceits, plywood, glass block, and stucco everything else, as well as the establishment modernist/pragmatists still searching for the best pre-fab facade panel, the speediest structural cladding, and the ultimate fireproof, maintenance-free, vandal-resisting, sound-absorbing, anti-static and integrated interior surfaces, all buildable in a jiffy by semicomatose laborers. These two directions in architecture seem to me to reflect rather well the two attitudes toward craftsmanship discussed earlier.

Perhaps all these forms of architecture—from handmade houses to the freeway hotel—with their differing needs for craftsmanship and expressive fine workmanship are appropriate responses to the variety of building tasks called for by today's culture and economy. But one thing is certain: the universal attraction to the well-made object, to the human touch in a human-scale environment, will not disappear, even though it may live on, alas, only as nostalgia—an oversize beam, an ersatz ceiling fan, an ashtray carved from stone.

**Despite what the construction price indexes tell you about the cost of building today, the resource input into buildings, i.e., the time, labor and material input, has gone down. In constant 1972 dollars (using the GNP deflator for construction) buildings in 1978 “cost” \$15/sq. ft. on average, down more or less smoothly from \$21.50/sq. ft. in 1950. Also, in constant 1972 dollars, the percent of GNP accounted for by contract construction dropped from 5.5% in 1950 to 4.3% in 1978, while the percentage of national income derived from construction and real estate together has stayed constant.*

So if you suspect that more buildings than ever today are stripped-down money machines, you are probably right. The very high cost of construction today is due to a variety of “non-quality” factors, such as market conditions (e.g., shortages), transport, salaries, profits, cost of capital, regulations, and various inefficiencies. Buildings, then, with high levels of craftsmanship, fine workmanship and materials were never easier to build in the past than they would be to build now. It is just that today we seem less willing or able, as a nation, to pay the price.



Michael Benedikt teaches design in the School of Architecture at the University of Texas at Austin.

Fancy the Ornament

Decorative Painting in Texas, 1840s – 1940s

By Buie Harwood



Free-hand ceiling painting in McGregor-Grimm House, Winedale.

"Ornament is that which, superadded to utility, renders the object more acceptable through bestowing on it an amount of beauty that it would not otherwise possess . . ."

—Christopher Dresser,
The Art of Decorative Design

We in Texas have a reservoir of 19th and early 20th century painted ornament decorating our residential and commercial structures. Some of this "people's art" responds to 19th century Victorian taste, and some responds more precisely to a vernacular expression. Our regional architectural heritage is fairly well documented, but Texas interiors of the fashionable period prior to the 1940s are not

pictorially well catalogued. However, efforts to record and document painted decoration in Texas interiors have been undertaken, and at this point over 100 structures are known to exist with their ornamentation "intact" or in a recordable state.

Interior decoration in Texas in the 19th century generally reflected a 10 to 20 year time lag as the Victorian style moved westward. The style was indeed accurately interpreted, but at a later date than when it was popular "back East." Communication and transportation problems account for most of the delayed impact of the style statement. Throughout the 19th century, there was an enormous

number of publications available in England and America on architecture, interiors, furnishings, decorative design, crafts, and on the concept of Victorian style. These publications took the form of books, magazines, and trade journals, and many were used as a reference by painters ornamenting Texas interiors. The improvements in communication allowed for more publications to be made available, and the improvements in transportation allowed for more materials of production to be purchased in Texas.

The general concept of Victorian interior decoration in England and America advocated the fashion for "pattern on pattern" and color to provide mood and



In-fill wall painting in Wesley Brethren Church, Wesley.

character. Innovators of the time who promoted decorative pattern design were Owen Jones, Christopher Dresser, and William Morris and the PreRaphaelites, to name but a few. These designers expressed interest in stylized, natural and geometric forms. Louis Sullivan continued this fascination for patterned surfaces in many of the structures that he designed in the early 20th century, but made the look more “contemporary” in style, line, and color. Deep, rich, dark colors were used in the Victorian era in combination with kerosene or gas lighting, reflecting a large and subdued environment which later was considered somewhat gloomy. The low level of light-

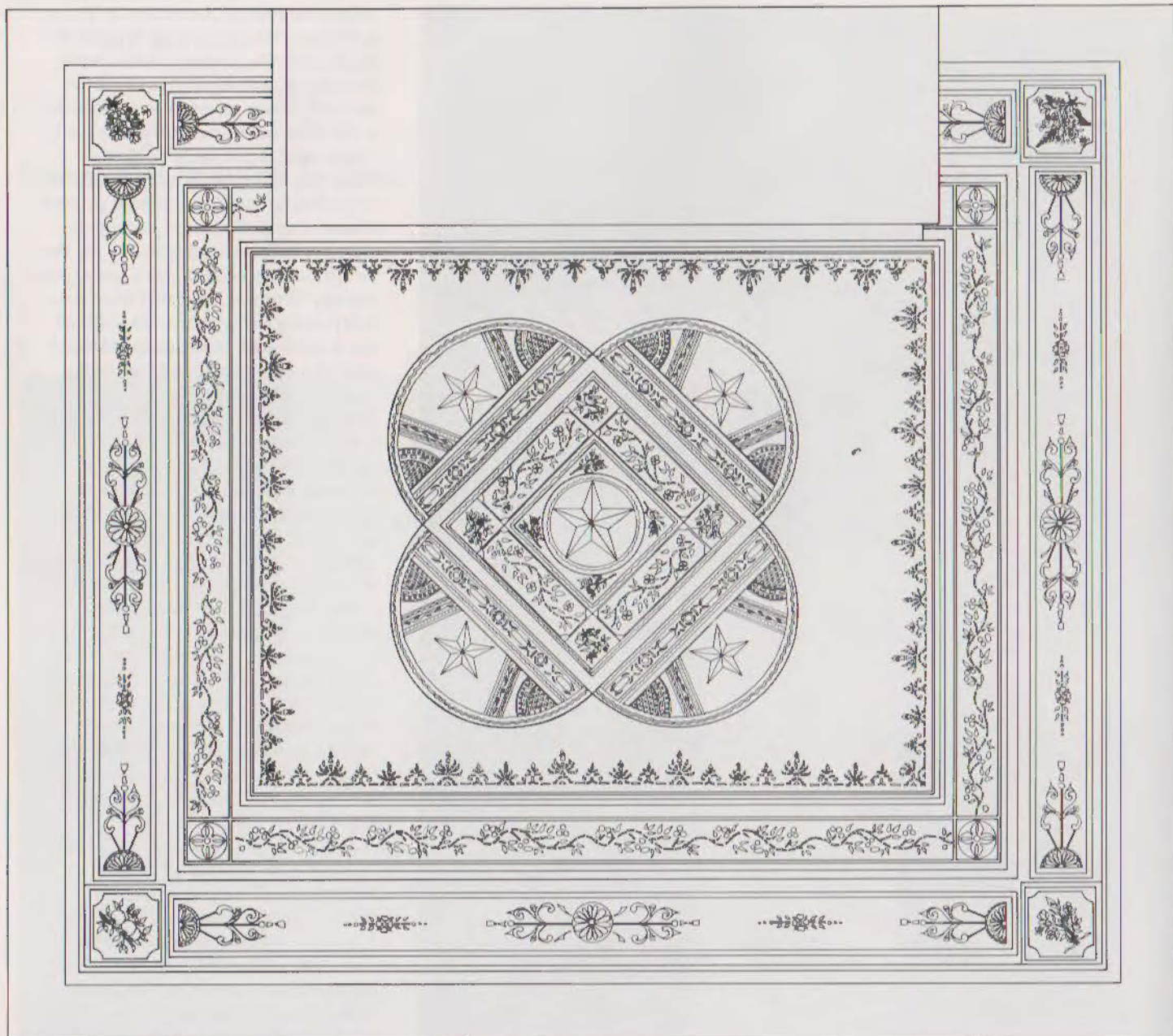
ing provided at this time directly influenced the richness of the colors, so colors that were fairly intense, of medium to dark value and with somewhat strong value contrast in effect became dull, very dark, and blurred. As fashion changed toward the turn of the century, lighter, more pastel colors were used in combination with electric lighting, and the room spaces became softer and more uniform in color scheme. And as lighter colors were introduced, the quality of embellishment changed and interiors became less ornamented.

In reviewing painted decoration in Texas, one can see many parallels with popular Victorian fashion. As in Vic-

toriana the painted decoration in Texas, as evidenced at this writing, is generally located on walls, ceilings, floors, moveable objects, and signage in or on the structure. There seems to be no disparity in the kinds of structures that one finds “decorated” in our state; “high style Victorian” buildings as well as regional vernacular architecture feature painted ornamentation. The latter seems to be more prevalent, probably due to the fact that painted decoration was a less expensive way to ornament at that time. Also, in reviewing the architectural material that is decorated, wooden structures seem to predominate, although ornamentation has been located on several stone buildings. An interesting fact surfaced in researching this project regarding the time frame of ornamenting a structure: sometimes the decoration was applied at the time of construction and as an integral part of design and sometimes it was applied 15 to 20 years after the structure was built. It is particularly noteworthy that many times, when the painting was applied several years after construction, the decoration did not always coordinate with the style of architecture, as in the case of the Larkin Rogers House in Hopewell Community near Mount Pleasant. The Rogers house is a well proportioned 1840s Greek Revival building with the front parlor decorated in a somewhat “primitive” and simple style, lacking any sense of sophistication. (The painted decoration was said to have been done around 1885 by an itinerant painter traveling West.) The Larkin Rogers House is an example of the “Anglo ownership” represented in our state, and the painter was described by the family as having a European background, quite possibly German. Hence, another factor evident in studying the existing ornamentation is the cultural diversity of the owners and painters, which ranges from Anglo, German, and Swiss to Spanish and Czech. These are just some of the nationalities that have been documented, but they are not all-inclusive of cultural heritage, and the owners and painters do not come from one principal background, and can represent the same background.

TYPES OF DECORATION

- “Stencilling” is located on walls, ceilings and floors, as represented through the use of pattern repeats, a typical feature of the decoration. Generally, colors are conveyed in a flat, un-



Reflected ceiling plan, Eichholt-Guderian House near Brenham.

shaded manner, with each pattern describing a different cut and color. Since this seems to have been a more popular method of ornamenting structures, many examples currently exist, including: the McGregor-Grimm House, Winedale/Round Top, after 1861, by Rudolph Melchior (Winedale Documentation); the Eichholt-Guderian House, Brenham area, around 1902, by Charlie Meister (Winedale Documentation); the Robert Warren House, Terrell, 1903-1904, by Keith & Company of Kansas City; and Our Lady of Grace Church in Lacoste, 1947, by William and Leo Donecker (interior painting destroyed).

- "Freehand painting," in the form of

murals and scenics, has been located on walls and ceilings in several Texas structures. Characteristic features include the lack of a pattern repeat and the incorporation of a unique, individualized design that has color variety and changes in scale. A selected example might include the Major Dowell Sterrett House in Beckville, possibly decorated around 1890.

- "In-fill painting" usually exists where there is evidence of an overall large repetitive pattern, generally over 24 inches long. The pattern is "transferred" to the surface to be decorated, and then after the pattern is removed, the area is painted. Typically, since the pattern is large,

the "transfer" process requires the help of several hands. The overall effect is a fairly flat color representation with some shading. Two of the most interesting examples of this type of decoration are the First Presbyterian Church in Galveston, and the Wesley Brethren Church in Wesley, 1890, by B. E. Lociak (Winedale Documentation).

- "Graining" is a type of decoration that simulates wood-graining through a painted process and is generally found on moldings, mantels, dados, and furniture. An interesting example of this ornamentation is evident in Browning Plantation in Chappell Hill, structure built in the 1860s (Winedale Documentation).

- “Marbling” is an effect and a process that simulates real marble through the decorative painting of wood. Moldings, mantels, and columns are the most typical features to be ornamented. Generally, there is great variation in the finished effect, since the process is very individualized, but it is common to have brush or feather lines show. A unique example of this type of decoration is found in St. Paul’s Lutheran Church in Serbin, supposedly painted by August Weber after 1854.

DESIGN FEATURES

- Size and shape of decoration usually followed a typical format of frieze border patterns that ranged from about four to 42 inches high and six to 24 inches or so wide. Murals and scenics generally covered most of the wall or ceiling, and ceiling medallions were characteristic. Curved and/or angular shapes predominated in most design statements.

- Motifs were stylized, naturalized, and geometric in design following 19th and early 20th century English and American fashion. Victoriana characteristics were evident in subject matter that included floral forms, classic motifs, fruits, fans, stars, landscapes, and musical instruments, to name just a few.

- Colors varied in Texas interiors from having a strong intensity to being somewhat dull. As in typical Victorian interiors of the early 19th century, medium value colors predominated. The most popular colors in Texas were blue, green, gray, cream, brown, red, rust, pink-orange, yellow, and gold. The use of color most probably responds to what colors were popular or available in the area at the time.

- Repetition of certain motifs is evident in different structures in the same area and in different areas of Texas. During the 19th century, most painters and decorators were referring to trade journals and books for design inspiration. Also, some patterns seem to have been available in manufactured, mass-produced forms.

- Registration of patterns was not usually measured in a mechanical way, but was more typically “eyeballed” into position on the surface. This method of application is verified when the spacing from a center point in two or more directions is not exactly equal.

Texas followed the fashion of Victorian ornamentation not only in the types of decoration and design features represent-



In-fill wall painting in the First Presbyterian Church in Galveston.

ed in and on structures, but also in the kind of painting materials used. Typical surfaces to apply paint onto were wood, plaster, gypsum, canvas and paper. Many different qualities and manufacturers of paint were available and are noted in newspaper advertisements of the day. Paint media included a casein or milk base paint, distemper or water base paint, and oil base paint. However, these paints were not generally used in combination.

Texas seems to be somewhat unique in the South and Southwest in the extent of painted decoration done in the late 19th and early 20th centuries, and in the extent of what has remained. However, existent artifacts are in *imminent* danger of being lost forever. Many people are now trying to restore or preserve their painted decoration and need to be concerned about accurate preliminary design and color documentation. (Munsell International Color Code System is recognized as appropriate for paint documentation.) It is important not to destroy original fabric, if possible, since its value will be verified by rarity, age, technique, painter/

decorator (if known), and perhaps the importance of the structure. Novices should call in qualified consultants to assist in preliminary investigation and in establishing an appropriate direction for restoration or preservation efforts. Above all, we must enjoy our ornament rather than destroy it.



Buie Harwood is an associate professor of interior design in the department of home economics at The University of Texas at Austin. She would like to thank the following for their help

in researching this article: Wayne Bell, John Volz, Peter Maxson, Dick MyCue, Eugene George, interior design students at the Winedale Institute in Historic Preservation, staff members of the Texas Historical Commission, and regional historic preservation organizations in Texas.



In-fill wall painting in the Robert Warren House in Terrell.



ONE OF A KIND..




The 290 Chair. Light yet strong, it stands up to the rigors of a cafeteria. It's stackable and can be coupled together, simplifying work in the convention hall. It's comfortable and best of all it's beautiful, which makes it nice to have around.

CADO/ROYAL SYSTEM, INC. DEPT. C-121. 155 Helen St., So. Plainfield, NJ. 07080. Showrooms: D&D Bldg., 979 Third Avenue, NYC/Chicago Merchandise Mart/Dallas, Oak Lawn Plaza/Los Angeles, PDC/Atlanta/Cincinnati/Denver/Houston/Miami/Philadelphia/San Francisco/Seattle.

Circle 21 on Reader Inquiry Card

Fast





United Bank Parking Addition
Denver, Colorado

Architect
James Sudler & Associates
Denver

General Contractor
Olson Construction
Denver

Structural Engineer
KKBNA Consulting Engineers
Denver

The most economical way to build a parking structure today is to build it fast, using precast/prestressed concrete from Stanley Structures.

San Felipe Tower Parking
Houston, Texas

Architect
S. I. Morris
Houston
General Contractor
Quanah Construction
Houston
Structural Engineer
CBM Engineers Inc.
Houston

Casper Parking Structure
Casper, Wyoming

Architect
Carl Walker & Associates
Minneapolis
General Contractor
Lower & Company
Casper
Structural Engineer
Carl Walker & Associates
Minneapolis



 **Stanley Structures**

No other building product offers the speed and other economic advantages associated with the use of prestressed concrete in the construction of parking structures.

While the precast/prestressed components are being manufactured at one of our production facilities, earthwork and foundation construction can proceed at the building site. When the products arrive at the site they can be quickly erected in just a matter of days.

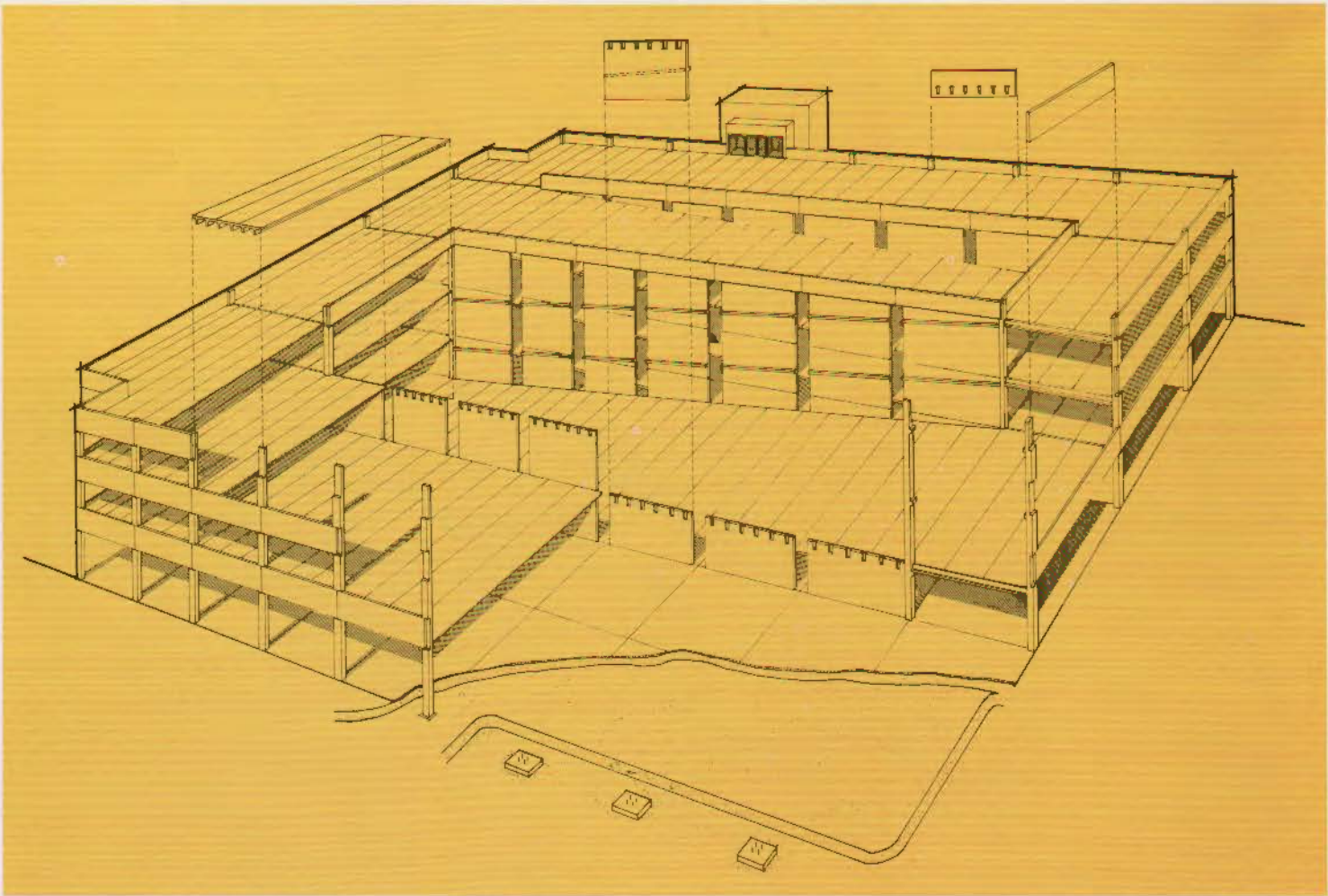
Faster construction means that construction loan periods are shorter, construction finance costs are reduced and income starts sooner.

Prestressed concrete's resistance to fire enables the owner to take advantage of lower insurance rates. Prestressed concrete is also virtually maintenance free, providing substantial, long-term savings to the owner.

For multi-level parking facilities, no other building product offers the functional advantages of long clear-span construction. Prestressed concrete allows the owner-investor to provide wide-open spaces for maximum parking capacity and fast, safe vehicular circulation.

The national trend in parking structures is to use prestressed concrete because it is the ideal building material. Stanley Structures has developed a network of prestressed concrete plants throughout the West. When it comes to your next building project, give us a call. We have the capabilities and experienced personnel to help you realize all the economies of building it with prestressed concrete and building it fast.

The Right Results From The Right Approach



We've put it all together before — countless times. Our experience in design, production, delivery and erection of structural and architectural concrete is second to none. We have the know-how to economically construct sound structures with broad appeal — the right results.

Our network of companies produces a wide range of standard and custom building components, permitting a variety of combinations and assemblies — the right approach.

When the subject is prestressed concrete structures, professional design consultants welcome our specialized knowledge. Be sure to talk to us at an early stage in your planning.



Stanley Structures

A Subsidiary of The Stanley Works

Colorado

5801 Pecos Street
P.O. Box 21070
Denver, Colorado 80221
Phone 303-458-6301

New Mexico

2340 Alamo Southeast
Suite 106
Albuquerque, New Mexico 87106
Phone 505-247-0391

Wyoming

421 Livingston Avenue
P.O. Box 527
Cheyenne, Wyoming 82001
Phone 307-638-8931

Wyoming Building
202 East 2nd
P.O. Box 2933
Casper, Wyoming 82601
Phone 307-234-3569

Texas

First National Bank Tower
Suite 570
6243 I-H 10, N.W.
San Antonio, Texas 78201
Phone 512-734-7923

2627 North Loop West
Suite 201
Houston, Texas 77008
Phone 713-861-0597

8150 North Central Expressway
Suite M2001
Dallas, Texas 75206
Phone 214-369-2903

Montana

1537 Avenue D.
P.O. Box 20336
Billings, Montana 59104
Phone 406-248-7131

**"ASK ME
ABOUT WOOD
SHINGLES"**

**"ASK ME
ABOUT ELK
PRESTIQUE"**



| | ELK PRESTIQUE | WOOD SHINGLES |
|---------------------------------------|------------------|------------------|
| Handsome wood look | <i>no</i> | <i>no</i> |
| Class "A" fire rating from U.L. | <i>no</i> | <i>no</i> |
| Warranty | <i>30 years</i> | <i>none</i> |
| Rot, Warp & Curl | <i>won't</i> | <i>will</i> |

I see a lot of wood shingle roofs in my line of work. I have to admit, they look terrific. Only thing...they've got one big problem. Fire! And why live with a fire hazard over your head?

For the handsome, random look of wood...without the fire hazard...I specify Elk Prestique™ laminated fiberglass shingles for the homes I design. Elk costs a lot less, too.

ELK
ROOFING
PRODUCTS

AN ELCOR COMPANY

DEMAND ELK PRESTIQUE LAMINATED FIBERGLASS SHINGLES!

Circle 22 on Reader Inquiry Card

A Summary of Trends

By Larry Paul Fuller

Note: The following observations largely are drawn from presentations made during a seminar entitled, "Trends in Health Facility Development for the 1980s," held in Houston last April and co-sponsored by the Texas Society of Architects and the Texas Hospital Association. A list of program faculty follows the article.

The American health care industry is burdened by tiers of overlapping and often contradictory government regulation. It is beset by conflicting demands to expand accessibility and improve service while avoiding duplication and containing costs. It is reeling from the impact of chaotic change in technology, society and the economy. In short, our health care system is hurting. And irretrievably caught up in the whole of this turmoil and uncertainty is the health care design professional, whose role in the development of health facilities is likely to be shaped by the major issues and trends summarized here.

Cost Containment

Assessing health care trends for the eighties, Joe Sprague, director of design and construction for the American Hospital Association (AMA), says, "I have to put cost containment at the top of the list. It's here to stay." Indeed, cost considerations permeate all aspects of the health care system and are having a major impact on design and construction. Despite the Carter Administration's unsuccessful attempts to establish mandatory controls, the industry still is under intense pressure to contain costs and has responded with its own voluntary effort (VE) promulgated by a broad-based coalition including the AMA, insurers, business, labor and consumers. Measures being taken include:

- Development of multi-hospital systems, shared services and joint purchase agreements in order to capitalize on economies of scale.

- Management improvement programs designed to increase the efficiency of the health care delivery system.
- Reduced hiring, cross-training of personnel.
- Regionalization of certain surgical procedures to avoid duplication of services.
- Modification of insurance benefits to encourage competition among various health care alternatives such as health maintenance organizations (HMOs). (Third party reimbursement, while seeming to protect the consumer from medical costs, actually has resulted in overutilization, lack of competition and higher *real* costs which ultimately the consumer must bear.)
- Limited capital investment and tighter utilization reviews.

For architects, continued emphasis on cost containment will mean tougher competition for fewer projects. A growing percentage of the work that is funded will be renovations and retrofits (although many clients are beginning to realize that new construction actually can be more cost-effective in the long run if the existing facility is not well suited for conversion to a particular new use, or if renovation is being considered only as an interim measure.) There will be increased use of fast-track scheduling in design and construction, an acknowledgement of the importance and expense of time in an inflationary economy. Facilities will be smaller, requiring more efficiency through innovative and informed space planning, with the result that health facility interiors and graphics will continue to emerge as specialties in the design field. Life cycle costing will be increasingly important, and architects will be held accountable for projects which are inefficient over the life of the building, as well as for initial cost-related decisions.

Regulation

Because of its large-scale significance and impact, the health care industry has had a long history of government regulation. Since the federal government became involved through the Hill-Burton Act of 1946, which had the positive effect of stimulating the construction of many needed facilities, regulation has expanded into a labyrinthine network whose cumulative effect many see as being detrimental to the overall system:

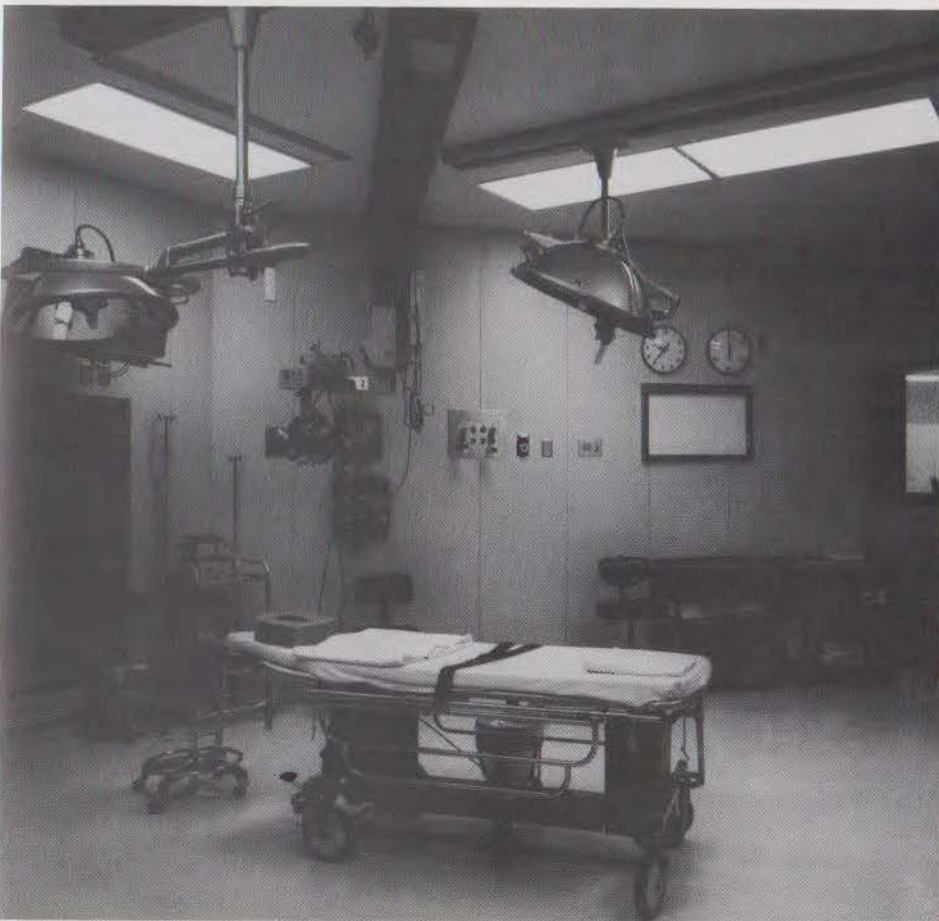
- Public Law 93-641, of 1974, which resulted in Health Systems Agencies (HSAs) and certificate of need legislation requiring need to be proven before facilities can be built.
- Minimum standards for construction and superimposition of local, state and national codes governing such areas as HVAC, life safety, electrical, fire prevention and accessibility for the handicapped.
- HEW conditions for participation in Medicare/Medicaid.
- IRS audits (which recently have involved an increasing number of cases resulting in liability for tax on income from unrelated activities.)

Ironically, a major purpose of much government regulation is the containment of escalating health care costs. Yet the documentation of conformance and the duplication of surveys by various jurisdictional agencies have attendant costs which actually *increase* the price of health care. In addition, since federal reimbursements are based on operating costs, health facilities have a disincentive to cut costs.

Continued governmental regulation will make it essential for architects to monitor health care issues and requirements and to understand the health planning process as legislatively connected at local, state and national levels. Also,



Nursing and Ancillary Unit, Ector County Medical Center Hospital, Odessa, 1978, Golemon & Rolfe, Houston. Project involved renovation of existing hospital and a seven-story addition including facilities for surgery (below), radiology, emergency, electrodiagnostic and dietary, as well as patient rooms and special care areas. Stepped lower portion of building reduces overall scale.



the increasing complexity of establishing need for new facilities and conforming to regulations once they are built will insure a continuing role for hospital consultants as part of the design team.

Energy

Although energy conservation measures now are a permanent concern for all buildings, they are particularly important in health facilities because of high energy requirements (for a hospital, up to three times the amount of consumption per square foot as in a large office building or apartment complex.) Again, government regulation comes into play in the form of the Department of Energy's proposed Energy Performance Standards for new Buildings (BEPS), which establishes energy budget levels in BTUs per square foot per year for medical facilities and other buildings. Architects generally prefer the performance standards concept over the prescriptive standards imposed by the 1974 criteria of ASHRAE 90-75 (American Society of Heating, Refrigeration and Air Conditioning Engineers). However, the AHA's Joe Sprague alleges that the BEPS budget figures for hospitals are arbitrary and based on a statistically invalid sampling of facilities and that they disregard the special needs and operating hours of medical facilities. The AIA Committee on Architecture for Health has expressed similar reservations.

Many of the energy-saving measures being proposed for health facilities are equally applicable to other building types, while some measures are primarily or uniquely suitable for hospitals and other medical settings. Herman Blum, of Herman Blum Consulting Engineers in Dallas, emphasizes the need to avoid overlooking "practical, immediate solutions" such as the air conditioning of ancillary spaces only during hours of use, two-speed motors for air-handling units, natural ventilation when and where appropriate, and efficient lighting systems. Similarly, architect Ron Skaggs, of Harwood K. Smith and Partners in Dallas, points out that simply organizing an equipment maintenance program to insure operating efficiency can result in significant energy savings. Skaggs recommends the initiation of energy audit programs in order to ascertain where and how energy is being used. He also observes that computerized energy management systems are being utilized widely with significant success.

Raymond Reed and George Mann, both on the architecture faculty at Texas

A&M, report that an estimated 20 percent of the energy costs engendered by many hospitals could be saved through conservation steps involving little or no capital investment and up to 40 percent through significant capital expenditures. Aside from standard considerations such as building orientation and configuration, Reed and Mann also recommend measures such as:

- Simpler, smaller and more accessible community hospitals and health facilities.
- Federal subsidization for some energy conservation measures.
- Limited use of plastics such as the disposable syringe.
- Restricted use of energy-intensive services.
- Location of large specialty hospitals in climate areas conducive to energy conservation.

In addition, Skaggs points out that a variety of new and improved mechanical systems, such as heat pumps and heat recovery devices, promise greater efficiency. And solar collections systems, although still requiring a long payback period, now are finding their way into health facilities, particularly when subsidized by the government.

Other Trends

An invaluable trait for designers of health facilities in the next decade will be the ability to adapt to what promises to be a period of dramatic change in areas such as the following:

Economy. The shift has been completed from an economy of abundance to an economy of limited resources. The future portends even more shortages and an erosion of what we know as "the good life." Ingenuity and inventiveness will be required in large commodities.

Technology. The technology explosion will continue, which means that design of facilities to accommodate new systems will become increasingly specialized. On the other hand, as Sprague points out, there is a limit to what we can afford in the way of expensive technology which merely improves the quality of an existing service.

Demography. Profound changes in the demography of the U.S. population promise to impact the provision of health care. Population shifts and the relocation of city centers will affect accessibility. The ratio of young to old will change dramatically. A combination of smaller families and increased longevity will mean, according to University of Houston Professor of Future Studies Dr.

James Coomer, that, "by the turn of the century, there is going to be one person working for every 2½ people who are retired and demanding the services of the society."

Aging. Longer life spans will mean an increased need for physical and emotional therapy and improved concepts for long-term care facilities. Bob McGhee and Bill Willson, of the University of Texas Science Center's Program on Aging, maintain that "Texas is supporting a large number of elderly in a medical care model when social services such as assistance in daily living and supervision are actually their most basic needs. The result of this medical model obsession is unnecessary institutionalization of many elderly."

Changing Concepts of Health Care. Community education and health promotion have helped begin a shift from curative to preventive concepts, including improved diets and physical fitness activities, which could result in a decrease in the use of traditional hospital services. The buzzword is "holistic care." A logical extension of this increased awareness, Coomer observes, is an influence on the marketplace in the form of income-producing health-related enterprises such as fitness centers.

A Broader Range of Care and Facilities. With what Coomer terms "the demise of the physician as demigod," consumers are utilizing other alternatives such as paraprofessionals and nurse practitioners. They also are seeking alternative delivery systems such as HMOs and pre-paid group practices and are demanding a plurality of sites for health care. Hence the health facility designer will be working within a broadening range of building types including: community health centers, outpatient clinics, emergency facilities, ambulatory centers within and outside the traditional hospital, surgi-centers, hospices and long-term care facilities. While demand for traditional tertiary and secondary care facilities will continue, the main emphasis for the next decade will be greater accessibility to primary care.

The Architect's Role. The range of participants in the health facility planning and development process is becoming broader and more complex; no longer is there a simple collaboration between architect and administrator. Coomer maintains that the traditional educational process undergone by architects interested in health facilities does not re-



Richard Payne

South Addition, John Sealy Hospital, Galveston, 1978, The Office of Pierce Goodwin Alexander, Houston. Recessed fenestration affords sun protection.



Mears photography

Main dining room, Wilford Hall, USAF Area Medical Center, Lackland Air Force Base, San Antonio, still in progress, Page Southerland Page, Austin, and Benham-Blair Associates, Oklahoma City. Cheerful color, aeronautical imagery.

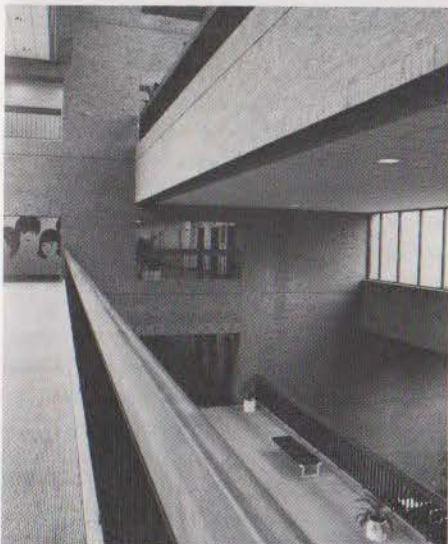


I. G. Holmes

The Women's Clinic, Lubbock, 1978, Charles R. Freeburg Associates, Lubbock. One of six examining suites, each with efficient layout including waiting area, two exam rooms, nurse's office, lab station and consultation room.



Scottish Rite Hospital for Crippled Children, Dallas, 1977, Harwood K. Smith & Partners, Dallas. Surgery recovery area has colorful ceiling graphics.



Hospital portion connected to ancillary units by multi-level bridges forming central atrium. (Scottish Rite).



Scottish Rite Hospital



Scottish Rite clinical laboratory utilizes modular component casework for flexibility.

flect the complexity of the architects' role. "Though the architectural education process is changing in some instances to become more integrated with health services, it is not evolving quickly enough. The decision-making process is clearly one of integrated systems, including politics, economics, legislation and architecture. Planning health care facilities is no longer a traditional, arbitrary or isolated process. It is now one of participation and consensus. The hospital architect of today must become the health systems architect of the future."

As for design itself, the effort often is diluted by the expenditure of energy to overcome the broad range of obstacles inherent in the facility development system. Yet certain requisites will endure: safety, efficiency, clarity, order, and human scale. But, in the end, the greatest challenge will be to cling to the notion that, despite severe limits on resources, aesthetic quality should not be compromised. For, as architectural writer William Marlin has said, architecture, like nature, has its own power to heal.

Program Faculty

Herman Blum, P.E., Chairman of the Board, Herman Blum Consulting Engineers, Inc., Dallas; *James Coomer*, Chairman of Future Studies, University of Houston, Clear Lake City; *Robert H. Cox*, AIA, Director, The Health Facilities Group, B.L.G.Y. Architects, Engineers and Planners, Austin; *William Donohoo*, Vice Chairman, THA Council on Construction and Plant Operation, Austin; *James Easter*, Chairman, TSA Committee on Architecture for Health, Dallas; *Garrett Graham*, Executive Vice President, Greater Houston Hospital Council, Houston; *Douglas D. Hawthorne*, Executive Vice President, Presbyterian Medical Center, Dallas; *George Mann*, AIA, College of Architecture and Environmental Design, Texas A&M University; *Robert H. McGee*, AIA, Director of Planning, The University of Texas Health Science Center, Houston; *Douglas Ogilvie*, AIA, President, Ogilvie Associates, Inc., Houston; *Merlin I. Olson*, Senior Vice President, Robert Douglass Associates, Inc., Houston; *Joseph T. Painter*, M.D., Vice President for Resource Planning and Evaluation, University of Texas Cancer System, Houston; *William E. Parisi*, Executive Vice President, Methodist Hospitals of Dallas, Dallas; *Raymond Reed*, AIA, College of Architecture and Environmental Design, Texas A&M University, College Station; *Joseph G. Sprague*, Director of Design and Construction, American Hospital Association, Chicago; *Robert Street*, Thomas Care Center, Inc., Houston; *Philip P. Sun*, AIA, Director of Planning, Harris County Hospital District; *Carlos Valbonna*, M.D., Professor and Chairman, Comm. Medicine, Baylor College of Medicine, Houston.

The John Sealy Hospital

A Study of Late 19th Century Hospital Design

By Larry J. Wygant

When John Sealy, a Galveston banker, merchant and investor, died in 1884, he left a will which specified that the sum of \$50,000 be allotted from his estate for "a charitable purpose." Sealy's heirs selected the construction of a new hospital in Galveston as a suitable monument to his memory.

From an historical perspective, it is not surprising that, four years later, it was the design proposal of architect Nicholas Joseph Clayton that was chosen from among four submissions as the scheme for the new John Sealy hospital. Clayton, who immigrated from Ireland with his widowed mother in the early 1840s, attended parochial schools in Cincinnati and, after an apprenticeship as a stonemason, began the study of architecture with the Memphis firm of Jones and Baldwin. It was as an employee of this firm that Clayton came to Galveston in 1872 to oversee construction of the Tremont Hotel and the First Presbyterian Church. Impressed with the city, Clayton decided to remain and establish Galveston's first professional architectural practice. Indeed, he became the city's most prominent architect and during the next four decades produced a widely respected body of work including residences, churches, and commercial and public buildings in Galveston, the state of Texas and the South.

According to the *Galveston Daily News*, Clayton's design for the new hospital contained:

... all the latest researches and studies made by him of the most recent and most scientific systems of hospital construction and sanitary arrangements, particularly in the extremely important respects of ventilation, heating, the comfort of the patients, and the convenience of the management of the institution. With these objects in view a special study has been made of the



John Sealy men's ward, circa 1906.

ways and means adopted in the leading hospitals of Europe—those of England, France, Russia, Belgium—and the most celebrated ones in this country, among them the Presbyterian hospital in New York, the St. Luke's hospital in Chicago, and the Johns Hopkins hospital in Baltimore. . . . (January 31, 1888)

Since Clayton did not visit these hospitals to study their features first-hand, he undoubtedly depended upon published descriptions to provide him with the necessary background for his design of the John Sealy Hospital. Sources on hospital design available to him included the architectural journals of the day and three widely distributed books on hospital construction and design. The most important of these books was Florence Nightingale's *Notes on Hospitals* (1859). The other two were published later and were much influenced by Nightingale's work.

After returning to England from the Crimean War, Florence Nightingale crusaded to apply her experience to the problem of hospital design. Up to that time the prevalent hospital design was the 18th century corridor plan in which double wards (two wards separated by an un-

broken wall) were arranged along a corridor. Nightingale advocated adoption of the pavilion plan.

While she did not originate this French design, her advocacy and refinements caused it to become known as the Nightingale Ward. Her idea incorporated an oblong ward ventilated on both sides by windows:

... at the entrance, a head nurse's room with one window commanding the ward and the other opening outdoors, and opposite that room a scullery; at the far end of the ward, behind a partition and independently ventilated, should be a bathroom and a lavatory on one side of the corridor and water closets on the other. And that is all. No dining room, no smaller rooms. (John D. Thompson and Grace Goldin in *The Hospital: A Social and Architectural History*, p. 159.)

Nightingale's belief in miasma as a cause of disease led her to place great emphasis on proper ventilation of the wards. This concern made the old corridor plan completely unsatisfactory because ventilation from outside windows supposedly would be contaminated as it



passed over intervening beds into the corridor, where the foul air then could spread to adjacent wards. "These morbid exhalations," stated Nightingale in her *Notes on Hospitals*, "must be instantly and perpetually carried off by ventilation."

For Florence Nightingale, the ideal hospital ward was not over two stories high, with a width of 30 feet, a length (for 32 patients) of at least 111½ feet, and a ceiling height of 16 to 17 feet. Windows would be placed to provide one for every two beds and would be within two or three feet of the floor and within one foot of the ceiling; "otherwise the top of the ward becomes a reservoir for foul air."

The second book that Nicholas Clayton might have used to guide him in the design of the John Sealy Hospital was *Hospital Plans*. This volume was the result of an invitation, sent by the trustees of the Johns Hopkins Hospital in Baltimore to five leading physicians, to submit recommendations for the new Johns Hopkins Hospital. The resulting five essays, published in 1875, incorporated the most advanced thinking on hospital design,

health, and disease etiology for the period. Acknowledging their debt to Florence Nightingale, all of the five essayists gave due consideration to 'light and air' and ventilation systems. Dr. Norton Folsom and Dr. Caspar Morris both stressed the importance of open verandas parallel to and on the south side of the wards. These open areas would allow the patients access to the fresh, clean, outdoor air at intervals. In addition, noted Dr. Morris in his essay, the "prevalence of the habit of tobacco-smoking is also so general that the appetite for it must be indulged" and open verandas would keep the smoke out of the wards.

The third volume, *Hospital Construction and Management*, which was available to architect Clayton, was published only five years prior to 1888, when Clayton prepared his plans for the John Sealy Hospital. The authors, Frederic J. Mouat and H. Saxon Snell, agreed with Nightingale on the superior design of the pavilion plan and the need for adequate ventilation but disagreed in certain other aspects of hospital design. Mouat and Snell did, for example, allow "annexes containing one, two, or three beds for the

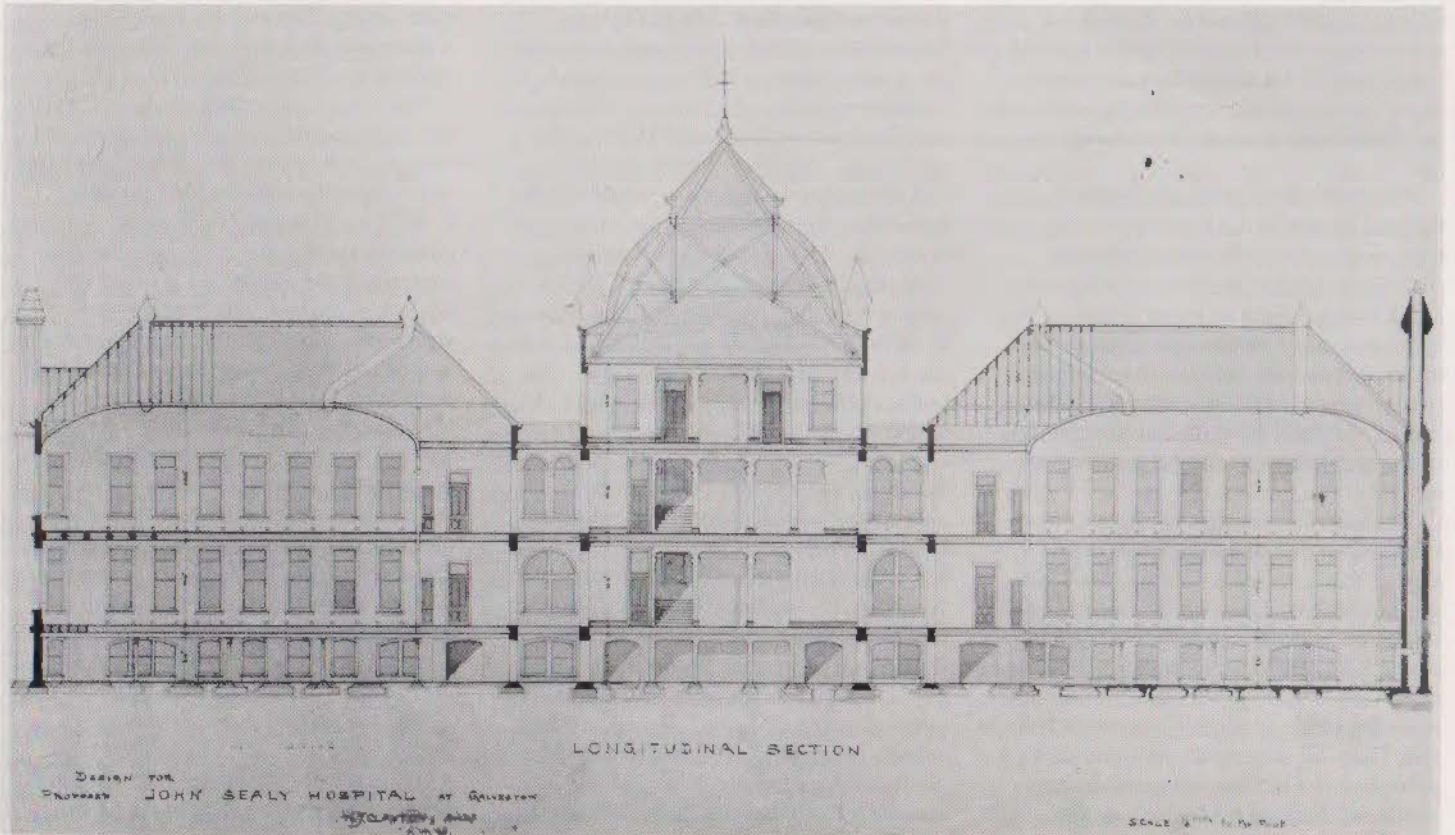
separation of cases" to be included in the ward design. The authors agreed with Nightingale on the necessity to limit the number of stories in the ward.

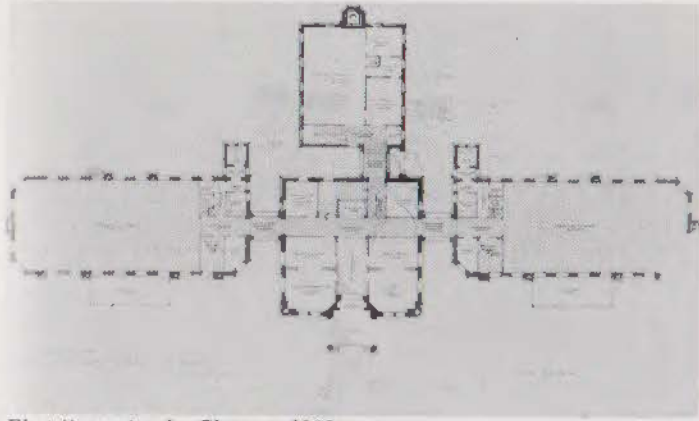
With this background of ideas, Clayton submitted his plans for the proposed John Sealy Hospital. His design compares very favorably with the ideal proposed in 1858 by Florence Nightingale. The planned hospital was a true pavilion design which the newspaper account described as "four distinct and separate structures, conveniently grouped and connected together, yet entirely isolated from each other by scientific means for sanitary reasons." The three-story administrative pavilion was centrally located for convenient access to the other areas of the hospital. Within this building was an elevator large enough to admit a bed and allow patients to be moved between floors without using the stairways. The kitchen, dining rooms, boiler room, and laundry were located in a separate building to the rear of the administrative pavilion.

It is the plan of the ward pavilion which most reveals the large debt that Clayton owed to Florence Nightingale and those who were influenced by her



ABOVE: After renovation, circa 1915. BELOW: Longitudinal section by Clayton, 1888.





First-floor plan by Clayton, 1888.



John Sealy Hospital, circa 1895.

ideas on hospital construction. The John Sealy Hospital wards were almost perfect examples of the Nightingale Ward. On each side of the central administrative pavilion were the ward pavilions, each two stories high over an eight-foot basement. The west pavilion was reserved for male patients and the east pavilion for female patients. The first floor of each ward was the medical ward while the second floor handled surgical cases. Each ward contained 20 beds in an area 33 feet wide and 76 feet long. Ceilings were 14 feet in the medical wards and 20 feet in the surgical wards.

Clayton's ward design deviated from that of Florence Nightingale only slightly. The head nurse's room did not have a view of the ward, and the bath and toilet facilities were not located at the opposite end of the wards from the entrance as recommended by Nightingale. However, in Clayton's design, the toilets were separated from the wards and independently ventilated. Clayton violated Nightingale's rule against smaller patient rooms by placing in each ward a small room with a single bed for "a delirious patient," and on the second floor of the administration pavilion, four small "private wards."

Like Nightingale, Clayton was concerned with proper isolation of the wards. In its description of the proposed hospital, the *Galveston Daily News* paid special attention to the system of isolation:

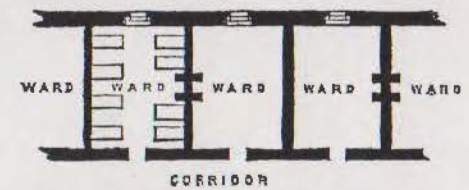
While the two wings occupied by the sick wards, the domestic buildings in the rear and the administration building in the center, are entirely separate and isolated from each other, they are nevertheless intimately connected together for all purposes of convenience by thoroughly ventilated corridors attaching the domestic building to the central pavilion and respecting the wards, which must be looked upon as the objects of paramount importance in

a hospital. This system of entire isolation, together with a close connection with the administration building, is one of the leading features of the place under consideration.

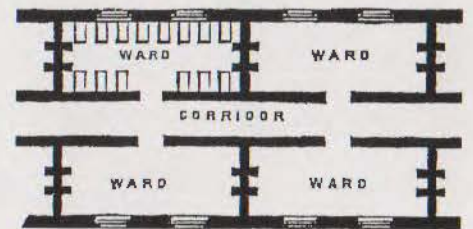
Along with isolation, ventilation played an important role in preventing the supposed miasmatic influences of foul air in the wards from spreading disease among the patients. It should be noticed, said the *News*, "the means that have been adopted to provide each separate bed in all the wards with its own distinct and thorough system of ventilation, all these different ventilating ducts ultimately leading into the large exhaust and extracting shafts at the outer ends of the wards." Clayton also specified that open-air verandas be placed on the south side of each ward to provide patients with the opportunity to enjoy fresh ocean breezes from the Gulf of Mexico.

Following the acceptance of Nicholas Clayton's architectural proposals in January, 1888, work began in May, and by November of the same year the roof was being placed on the structure. With the final cost of almost \$70,000 paid entirely by the Sealy estate and family, the new John Sealy Hospital was opened on the north side of "The Strand" between 8th and 9th Streets in January of 1890. When the University of Texas Medical Branch opened in 1891, the city transferred the property and building to the state of Texas to serve as part of the new university.

The hospital building remained basically unchanged for 27 years until 1915 when extensive remodeling was begun. The \$270,000 renovation included the addition of a floor to each ward pavilion. Clayton's Nightingale-inspired hospital served the needs of the University of Texas Medical Branch in Galveston for 74 years before it was demolished in 1962.



Corridor plans: "what ought not to be done."

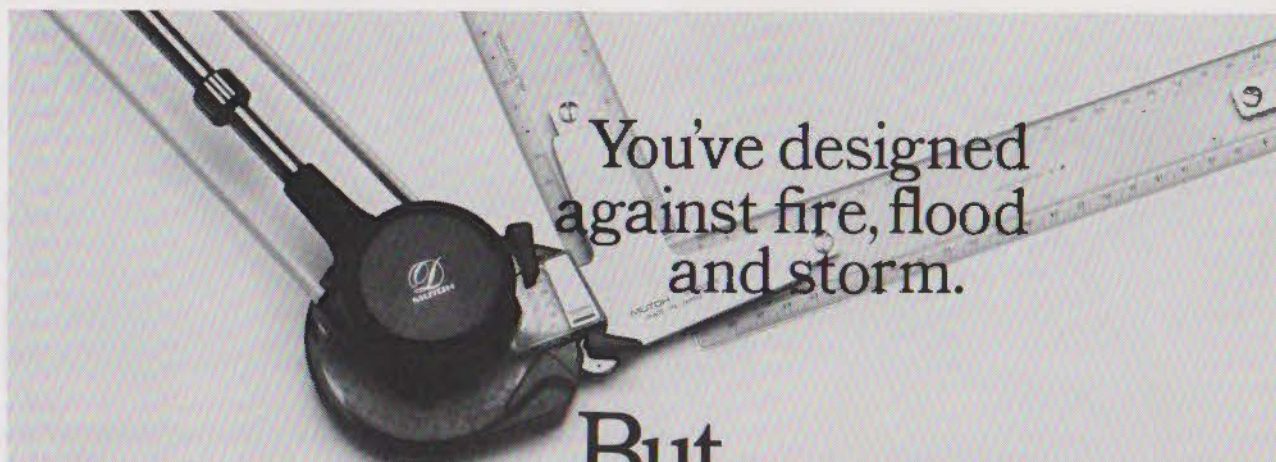


Larry J. Wygant is the associate director for history of medicine and archives at the Moody Medical Library at The University of Texas Medical Branch in Galveston. This article is adapted from one which originally appeared in the Moody Library publication, *The Bookman*.

The *Bookman*.

Additional References

- Brieger, Gert H. "The Original Plans for the Johns Hopkins and Their Historical Significance."
- Nesbitt, Robert A. "The Legend of Nicholas Clayton." *Port of Galveston*, 7(6):6, 1974.
- Rosenfield, Isadore. *Hospital Architecture and Beyond*. New York: Van Nostrand, 1969.
- Sealy & Smith Foundation. *Historical Review of the Medical Branch of the University of Texas and of the Sealy & Smith Foundation for the John Sealy Hospital, Galveston: Sealy & Smith Foundation, 1942.*



You've designed
against fire, flood
and storm.

But how about a communications explosion?

The communications explosion is only beginning. The buildings you design today must be capable of handling expanding needs for data communications, multiple video terminal installations and teletype units, as well as more sophisticated telephone systems.

Our Building Industry Consultants can help you avoid the pitfalls of over- or underdesigning for these coming communications needs. They're communications experts who know the ins and outs of building design and construction. They'll help you design for the most efficient and economical use of space and materials for the communications needs of today and the expanding needs of tomorrow.

Call your GTE Building Industry Consultants early in the design stages of your next project. The earlier the better. There's never any extra charge for their services. And they can help you and your client avoid design changes now, and expensive alterations in the future.

For more information about GTE's Building Industry Consultants call C. C. Scott, collect, at 915-944-5432 or use the coupon below.

General Telephone of the Southwest
Attention: C. C. Scott
P.O. Box 1001
San Angelo, Texas 76901



Building Industry Consulting Service

Please have a General Telephone Building Industry Consultant contact me to discuss how they can help in planning for my communications needs.

Name _____ Title _____

Company _____

Address _____

City _____ State _____ Zip _____



There's no puzzle to it.

SUREWALL® Cement is your constructive solution.

The Puzzle: To construct a shopping center economically without sacrificing aesthetic appeal.

The Solution: SUREWALL® Surface Bonding Cement.

The Result: The Thousand Oaks Village Shopping Center in San Antonio. It's architecturally attractive and was economical to build. This shopping center was built with SUREWALL Cement after builder Stanley Stein

ran four different cost comparisons against tilt-wall. SUREWALL Surface Bonding Cement is easier to use than mortar and in most cases, cheaper to use than tilt-wall. And, SUREWALL Cement is the only surface bonding cement which meets all major building code approvals. Compare SUREWALL Cement for yourself. There's no puzzle to it — SUREWALL Surface Bonding Cement is your constructive solution.

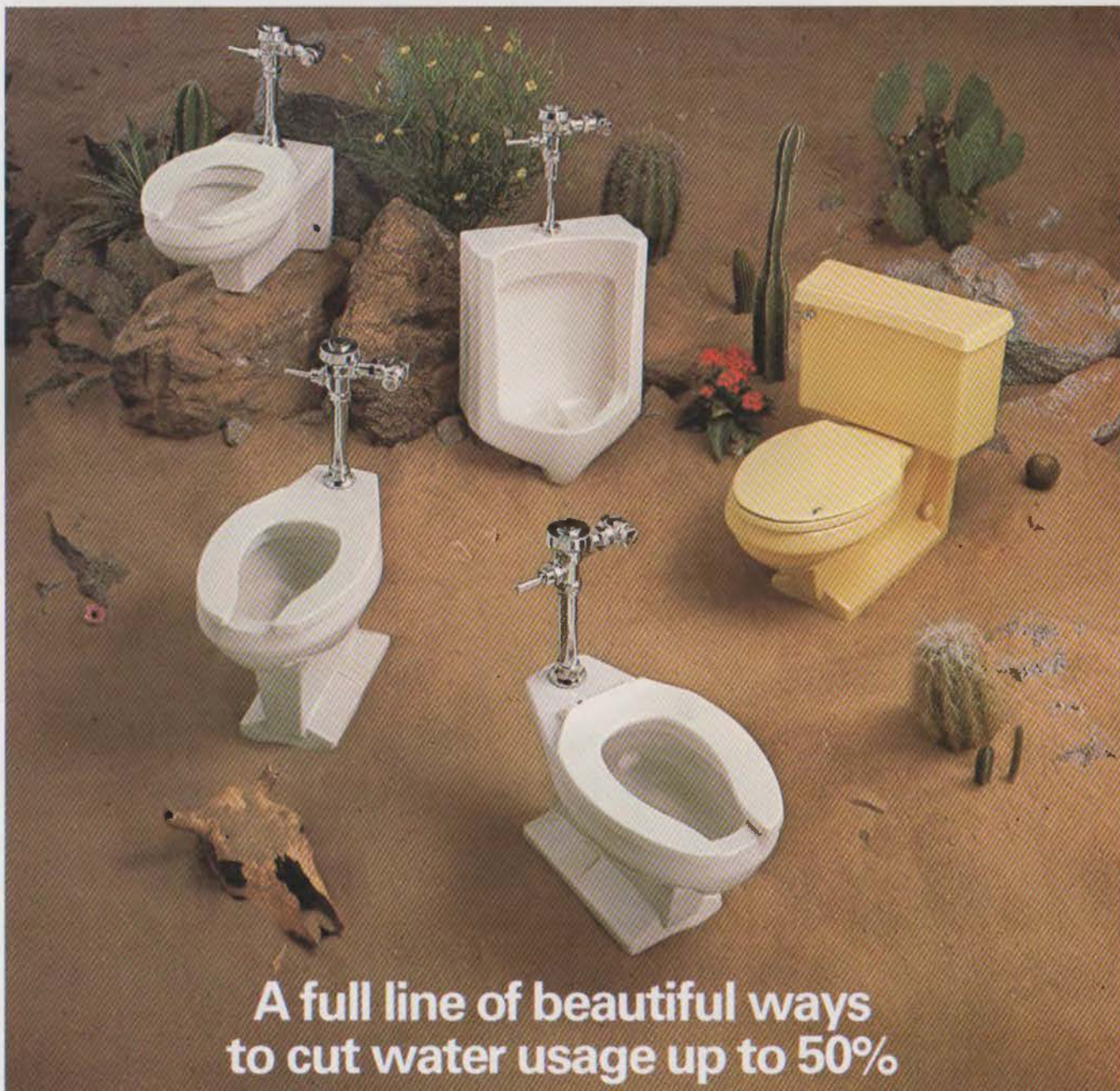


Barrett Industries

6889 Evans Rd. • Rt. 3 Box 211 BI • San Antonio, TX 78218 • (512) 651-6550

SUREWALL® is a trademark of the W.R. Bonsal Co.

Circle 24 on Reader Inquiry Card



A full line of beautiful ways to cut water usage up to 50%

□ Where will it all end? Water and sewage costs keep climbing—while supplies of clean, usable water keep dwindling. Communities are establishing codes that mandate specific water usage limits for fixtures and fittings. □ That's why we offer watersaving fixtures and fittings for every building need, including urinals, faucets, showerheads, wall hung and floor mounted flush-valve toilets, residential water closets, and special high fixtures for nursing homes. No other manufacturer has such a complete line of fixtures that save water. In total, laboratory tests indicate that they can cut water usage up to 50%. □ Eljer saves more than just water—because there's no premium price on our watersaving fixtures. They are normal production models so there's no special ordering needed to get what you want. Eljer watersavers are in stock and ready to ship right now. □ We'd like to share our complete data on how our products affect water usage—as determined by an independent testing laboratory. □ Just see your Eljer Wholesaler or write and ask about Eljer's full line of watersavers.

ELJER PLUMBINGWARE
Wallace Murray Corporation
Dept. SL, 3 Gateway Center
Pittsburgh, Pennsylvania 15222

ELJER

WallaceMurray

ELJER

Texas Distributors

Abilene
Western Plumbing Wholesalers
915/672-3201

Austin & San Antonio
International Supply of Austin
512/452-5912
International Supply of San Antonio
512/223-4275

Baytown
Moore Supply Co.
713/427-5601

Beaumont
Moore Supply Co.
713/832-8429

Bryan
Moore Supply Co.
713/832-8151

Conroe
Moore Supply Co.
713/756-4445

Dallas
Apex Supply Co.
214/741-5463
Goodman Supply Co.
214/565-1005

El Paso
Central Supply Co.
915/544-7770

Garland
International Supply
214/494-2329

Houston
Economy Plumbing Supply
713/223-4921

Killeen
Killeen Distributors
817/526-3028

**Lubbock, Amarillo,
Midland-Odessa**
Fields & Co.
(Lubbock) 806/762-0241
(Amarillo) 806/374-4672
(Midland-Odessa) 915/563-0501

Nacogdoches
Moore Supply Co.
713/564-8331

Pharr
S & S Wholesale Supply
512/787-8855

Texarkana
Double Jay Supply
214/793-2211

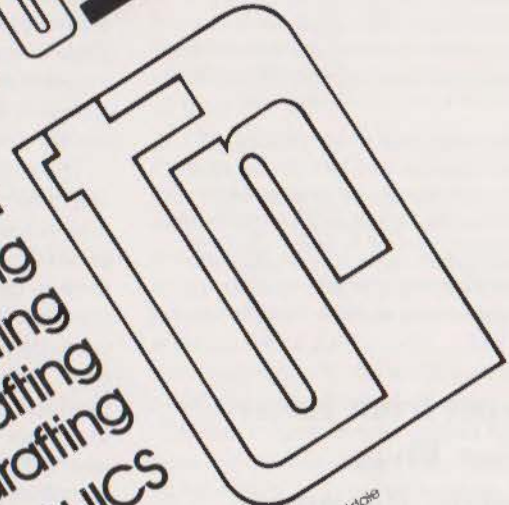
Wichita Falls
Connor-Gibson Supply
817/767-2506

Consult Your Proven Professional.

We provide complete professional Pin Graphic consultation with a registered architect on our staff as a courtesy to our clients. Please contact us so that we may assist you with these or any of your other reproduction requirements.

Thomas Reppographics

restoration
reformatting
paste-up drafting
scissors drafting
photo-drafting
PIN GRAPHICS



Houston
5151 Mitchelldale
682-1139
3330 Eastside
528-5303

Dallas
1555 W. Mockingbird Ln.
634-8761
4716 Greenville Ave.
363-6561
3528 McKinney Ave.
522-3520
2518 Forest Ln.
620-1861
420 S. Ervay
741-1782

Farmers Branch
14430 Midway Rd.
386-0386

Richardson
805 S. Sherman
231-7161

Garland
2521 Forest Ln.
276-9456

TSA Goals Conference Essay Series Completed

Following are excerpts from the last two of six essays which served as a basis for discussion during TSA's TEXAS TOMORROW Goals Conference at Lakeway Inn near Austin March 28. (See the May/June and July/August issues of *Texas Architect* for excerpts from essays one and two—"The Professional Society," by Reagan George, AIA, and "The Profession," by Herbert E. Duncan, FAIA—and essays three and four—"Public Policy," by Walter Wagner, AIA, and "Consumerism and the Profession," by Harold C. Fleming.) The stated purpose of the conference—which attracted 73 architects, businessmen, scholars and other professional and community leaders—was to "pinpoint and address the social, economic and environmental challenges which will be shared by architects and others vitally concerned with the future of Texas in the 1980s."

The second phase of TSA's 1980 Goals Program involves the Society's 17 chapters in a review of the proposed goals prior to final revisions and formal ratification during the TSA annual meeting in Dallas November 6-8. Programs to achieve the goals will be initiated during Fort Worth architect Lee Roy Hahnfeld's term as 1981 TSA president.

Excerpts from Essay Number Five: "Growth, Resources, Environment"

By Catherine H. Powell

"Just as the 1950s and 1960s have been called the California Decades, the 1980s and 1990s may well be the Texas Decades. Having overtaken Pennsylvania as the third most populous state only five years ago, Texas, with an estimated population of 13 million, is rapidly gaining on New York, with 17.7 million, for No. 2."—Wm. K. Stevens, "Texas Barges Into The 20th Century," N.Y. Times, November, 1979.

The Certainty of Continuing Growth in Texas

Of the recent growth in Texas, a very large portion is due to net immigration—people drawn to this most vigorous part of the Sunbelt by economic opportunity. The increase in population between 1970 and 1976 (the dawn of the Sunbelt Era) was over twice as great a gain as in the nation as a whole. Even if the rate of gain were to be slightly reduced, Texas would still have 16.5 million people by the year 2000. A large part of this population growth will occur in and near the already established regional centers; but a significant part will occur in the smaller centers where expansion room is most readily available.

The economy itself will continue to diversify, depending less on oil and gas production and related industries. The greatest gains have been and will continue to be in manufacturing and service industries; but oil and gas and agribusiness will continue to be major parts of the economy. Texas is a major food-fiber-grain producer for the nation. One of the more important effects of the diversifying economy will be an emphasis on smaller-scale operations than has characterized the major exploitative activities of the past. These new processes will require different types of services, from capital availability to housing and public support services for different types of workers.

The growth in the coming decade is clearly unavoidable and it will be of a type significantly different to require different responses from governments and from professionals. The period of growth also will be a period of turbulence.

The Challenge to Account for Quality

It is a lesson of history that opportunity and turbulence go hand-in-hand. Although not always exploited, opportunity accompanies any form of change; and

conversely, periods of change rarely exhibit clear directions for the most satisfactory long-term results. On the threshold of major achievements in growth and production, Texans must not assume that a vigorous system will automatically produce desirable results. Members of the design professions, whose activities collectively produce the "built environment," will be called to account for its quality by both its users and critics who yearly become more knowledgeable and demanding.

Most thinking people agree that 20th century American urbanization is not of high quality. In the words of René Dubos: "This society has more comfort, more safety, and power than any before it, but the quality of life is cheapened by the physical and emotional junk heap we have created."—*So Human An Animal*, p. 5

The list of contributions to the "junk heap" is all too familiar: air and water pollution, ground poisoning, lack of open space, loss of any sense of place through endless sprawl and monotonous strip development; too much noise, too little privacy; and perhaps just as disturbing, the relentless gobbling up of the countryside and the alarming destruction of wilderness and virgin soil. The paradox, of course, is that we *can* afford quality environments: "Environmental ugliness and the rape of nature can be forgiven when they result from poverty, but not when they occur in the midst of plenty and indeed are produced by wealth." (ibid., p. 3)

What is meant by quality environment? The only possible answer to this question is another set of questions which asks what human beings *need* in order to realize both individual potential and the collective potential of a particular society. There are two inescapable groups of needs: 1) those which are biological-

ly inherent in man, having to do with individual development—the opportunity to develop mental and physical senses through contact with nature, frequent and positive contact with other people, a diversity of environments, and quiet and privacy to internalize such stimuli; 2) those relating to social development—linkages to groups, stability of environmental orientation, and, thus, opportunities to express the common understandings and positive hopes of groups as a whole.

The fact that these needs are inescapable does not mean that man is powerless to mold his environment, for man is both adaptive and selective: “Design, rather than anarchy, characterizes life. In human life, design implies the acceptance and even the deliberate choice of certain constraints which are deterministic to the extent that they incorporate the influence of the past and of the environment. But design is also the expression of free will because it always involves value judgments and anticipates the future.” (ibid., p. 135)

A quality environment, then, is not a single organization of nature and man’s works. It has had various historical manifestations which we may analyze to understand what set of constraints was operating to produce the particular quality in its time, but which we should not attempt to reproduce in a different time under different constraints. Instead, we must seek aspects of quality which meet the constraints of *our* time.

Two concepts should guide design professionals in setting goals to guide growth in the coming decades in Texas. First, those elements and activities which are clearly wasteful and destructive should be corrected; and second, positive steps toward defining design principles which produce environments satisfying human and social needs at the most basic levels should be undertaken.

In a growth economy, it is difficult to ask others to focus on long-term impacts, even when they seem clear to some. It may help to examine some of the attitudes about growth historically ascribed to Texans.

Texan Attitudes: Positives and Negatives

People in Texas have always been in favor of growth, an attitude which is part of the frontier character. Texans also think big, having inherited a certain ranginess in thinking from the Spanish, and having had to adapt to the realities of landscape and climate. Whereas eight acres once comfortably supported a fam-

“Members of the design professions, whose activities collectively produce the ‘built environment,’ will be called to account for its quality . . .”

ily in New England, a Texas cow would have starved to death on that amount of land. These attitudes have produced some ingenious and quite pragmatic schemes—Longhorn cattle and the Houston Ship Channel, for examples. They can also lead to wild and impractical ideas, such as the Texas Water Plan which envisioned pumping water from the Mississippi River over 1,000 miles uphill to the high plains in an open canal, using enormous amounts of energy and delivering a highly saline product because of evaporation.

When some of the other parts of the frontier character are involved in an idea—self-reliance, neighborliness, energetic hard work—the result is most often positive for all. Self-reliance, however, can become fierce individualism, involving wasteful duplication or rejection of cooperation. Large-scale thinking may turn into exploitation. In a growth economy, attitudes of this type may have unfortunate and negative results. We have already seen some of these: deadly pollution of the Houston Ship Channel and coastal waters, bays and estuaries; stripping of rich and virgin topsoil and valuable kaolin to get at lignite; overmining of ground-water; and urban sprawl fed by highways which operate in failure mode much of the time.

It will be important to emphasize the best of these historic attitudes in building quality environments in the coming decades. A primary constraint should be recognized: bigger is not necessarily better. Recognizing constraints, selecting the best options, choosing the most valuable goals—how can design professionals guide the state’s development? A concept of resource management may give some insights.

How Can Resources be Managed?

“Texas has an Arcadian pre-eminence among the states, and an opulent future before her, which only wanton mismanagement can forfeit.”—Frederick Law Olmsted, A Journey Through Texas, 1851

It is one thing to agree that we want a

quality environment, and quite another to agree on how we might achieve it. A concept of resource management might help us to define some general goals and perhaps also some specific objectives. Equity and long-term efficiency are the twin goals of resource management. Prerequisites to effectiveness, however, are, first, awareness of what resources are; and, second, a commitment to cooperation in using them wisely. Some of the more obvious constraints posing challenges to design professionals relate to two major scarce resource groups which clearly require management of some sort if we are to avoid massive disturbances in our lifestyle and society.

Energy

The most obviously scarce resource is energy, specifically because of our dependence upon fossil fuels. “For one thing,” asks a Houston banker, “what happens when the age of oil is over, an event that might well take place within the lifetimes of present-day Texans?” The very scale of the state has bred an attitude of energy consumption into the bones of all Texans. In the past, migrants from the more industrialized areas have been first appalled at the distances routinely driven by Texans, and then accepted as natural this unusual consumption of time and fuel.

The days of cheap energy are over, even in Texas; and patterns of development will have to be reorganized. This will require enormous re-education which can only be achieved incrementally and with a united effort by many different groups of professionals. Following is a minimal list of policy points which all who participate in the environment-building process should consider.

Density: Low density sprawl encourages use of the automobile, raises costs of delivering all types of services, and makes more efficient transportation systems unworkable. We should begin to encourage the increase of densities, both residential and non-residential, so that they support some efficient and equitable form of mass transit. Particularly important would be density increases along major movement corridors in logical patterns which may be either continuous or grouped into nodes. Houston, with one foot already planted in a Buck Rogers time warp, is moving toward the centers pattern, although the transit problem which would make it workable remains to be solved. Beyond this logical step is the challenge of working out new concepts of urban design based on energy

THE FRENCH COLLECTION CERABATI

The European tradition of richness, warmth and sophistication are redefined in Anjou tile by Cerabati. It's the classic styling that satisfies the discriminating tastes of today's particular home buyers.

Anjou is a vitrified porcelain ceramic tile that is rugged. Ideal for use outdoors around pools. With its 8" hexagon pattern it's perfect indoors where durability and minimal upkeep are specified.

It is elegance in the finest French tradition.

Call Monarch Tile Manufacturing, Inc. today to find out why Anjou by Cerabati is the choice of builders and buyers alike.



MONARCH
TILE MANUFACTURING, INC.

Texas Distributors

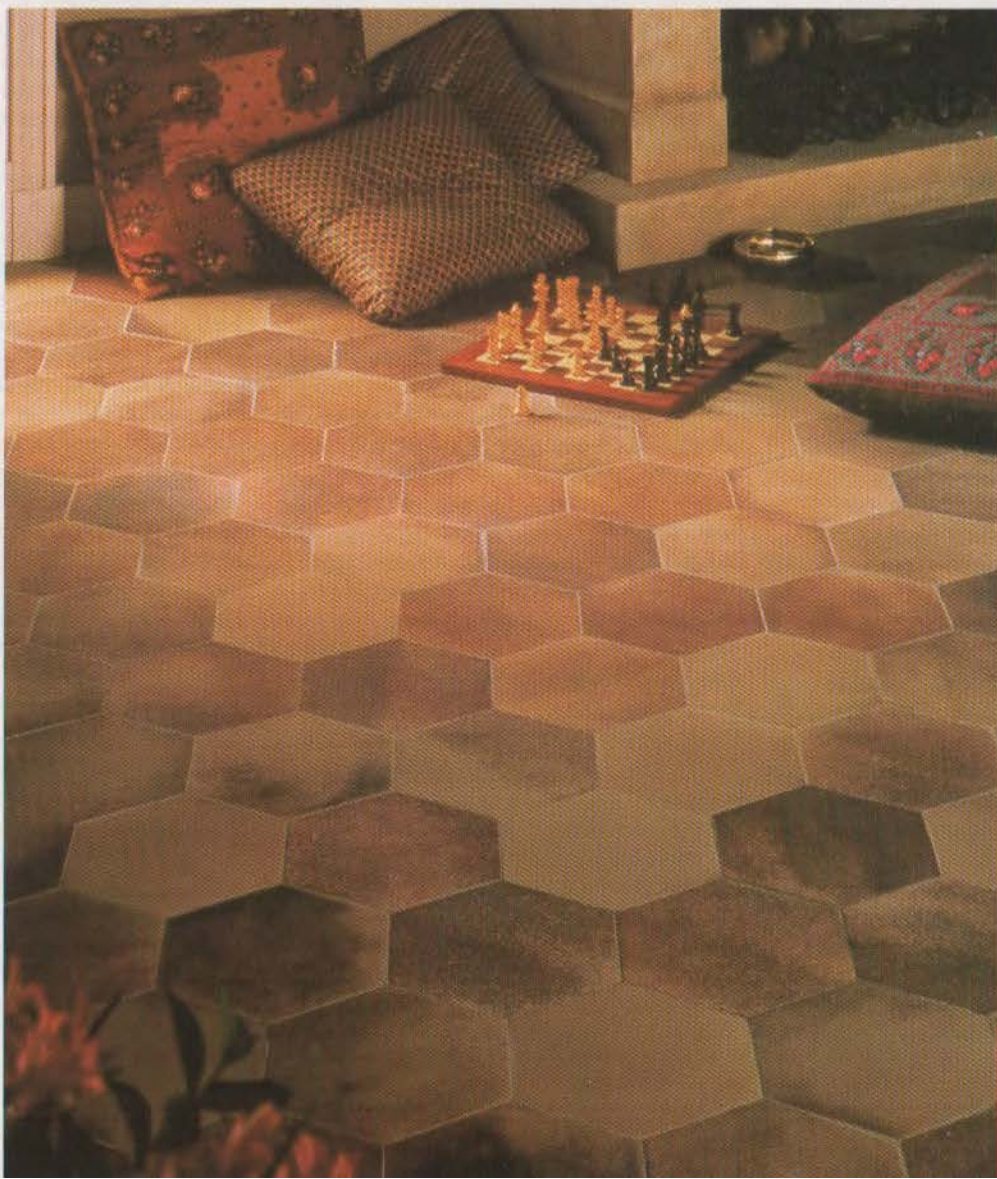
American Tile

Dallas/2859 Merrell Rd (214) 243-2577
Fort Worth/3133 Bryan St (817) 924-2235
Austin/3100 Industrial Terrace (512) 837-2843

H&R Johnson

Houston/7590 Harwin (713) 977-7724

Circle 27 on Reader Inquiry Card



constraints. The energy-independent structure, or group of structures, utilizing wind or solar power may be the only conditions under which low density urbanization should be allowed.

Density increase does not mean overcrowding. It means using less space more effectively. Proper unit design is the first requirement; but also needed is experimentation with better unit relationships and groupings. We need a new and more humane medium-density urban building block.

Scale of Development: Continued technological development will assist in more efficient fuel usage, but effective use of such developments will depend upon attitudinal and institutional changes among designers. Co-generation (production of heating and cooling along with power generation) is technologically and economically possible; but its successful use requires a scale change in the basic building block of current urban development. Here the need is for larger-scale developments of mixed uses designed together for a longer-than-usual life span, perhaps separated from each other by carefully chosen open spaces. Design professionals will be challenged to master both the technical processes and more effective techniques of communication with non-designers.

Building Design: Energy audits and life-of-building cost-analysis will continue to be important in designing for energy conservation. As technology improves fuel efficiency, new mechanisms will come into more common use. Architects, working with engineers, can assist not only by design responsiveness, but also by educating clients to accept both minimum energy plans and optimum space programs.

To be acceptable, however, programs must be responsive to clients' needs. Architects have long undervalued the programming aspect of the profession, while urban anthropologists and social psychologists have recently discovered it.

Site Design: Significant amounts of energy can be conserved by siting and designing for climate control. The wide variation in Texas' climates should be looked upon by architects as an ideal opportunity for mastering passive techniques, and even for achieving excellence and leadership.

Land, Water and Waste

Land and water are resources traditionally thought of as outside the purview of architects. But they must, now, in Texas, command our attention. In a state long

“Quality is what we get when men recognize their human needs and the constraints of their times and then choose the most appropriate actions.”

accustomed to vast amounts of land, past practices of urban development have not been land-conserving. Economically, waste of land may not matter greatly for a little while longer. Already, however, many cities cannot afford to deliver full services to developments at low densities or great distances. The demands of a growing population and the shortage of energy may serve to alter patterns somewhat. But the more important aspects of proper land use are not merely compactness.

Where Not to Build: Not all land in urban areas should be developed. In an age of massive machinery and little respect for nature, it is almost axiomatic that anything can be built anywhere. Environment builders must come to respect the characteristics of land as contributing to its capacity to assist us both in more efficient development and in creating higher quality development. Improper urbanization paves over the soil, channelizes streams, lowers water tables, creates down-stream floods, causes subsidence in loosely compacted soils, and carries toxic substances to sub-soil strata, setting in motion an endless cycle of increased run-off, flood-prevention structures or channels, increased building and more run-off. It is far more efficient to use flood plains for their natural function, to approximate as closely as possible the natural systems of water flow and retention.

Water: Texas' most serious resource management problem in the coming decades will be water. It is the limiting factor in all kinds of growth, from agriculture to manufacturing, to human consumption. The depletion of the Ogallala Aquifer in the high plains puts much of Texas' cotton production in jeopardy at a time when there is an increased demand for natural fibers. Continued development over any of the 16 major aquifer recharge zones in the state carries the threat of recharge loss and the almost certain risk of water quality degradation. Costly treatment is then

required as well as very expensive surface storage.

Texas is a water-scarce region and cyclical droughts can be disastrous, even in a highly diversified economy. There is probably sufficient water in the state to meet all needs, but on a long-term basis, management techniques will have to be applied to ground-water as well as to surface water, starting with an equitable ground-water law.

Agricultural Land: There also is a need to look to the long-term protection of agricultural lands which are in conflict with urban expansion. Urban demands tend to overwhelm rural systems and are often justified as “essential to economic development.” The world scarcity of food puts Texas, a major producer, in a good economic position; but this will disappear if rural needs are not balanced against urban ones. Already we have suffered losses to urbanization of valuable citrus-producing lands in the Valley, East Texas farms to power generation cooling lakes, and some of the richest virgin topsoil in the state to lignite strip-mining in Bastrop County. We cannot rape the land we need for sustenance.

Waste: Urbanization creates vast and serious waste disposal problems, from increased and polluted storm run-off which may poison water sources and ultimately sea life in bays and estuaries; to disposal of excess heat in water; to commandeering rural areas for solid waste disposal by techniques which eventually poison the ground; to extremely serious problems surrounding the disposal of toxic and hazardous substances. Texas is vulnerable not only because of its own attitudes about plenty of land, but also because it is perceived by the rest of the nation as having plenty to spare for the unwanted and hazardous products of others.

But How Do We Get Quality?

Since we cannot describe quality, we cannot prescribe it. Quality is what we get when “men meet the challenge of their environment through the instrumentality of their innate endowment, steered by the vision of their goals.” (Dubos.) Quality is what we get when men recognize their human needs and the constraints of their times and then choose the most appropriate actions. Environment-builders must select the criteria for such choices.

At the most general level, the criteria must support and enhance the natural system, the context for individual development, and the setting for group or

social activity. Each development should consider all three equally. A major objective should be to seek diversity of environments, natural and man-made. Larger and larger populations require more and more organization and, without diversity of environments, only those who can tolerate regimentation survive. Rigid regulation at the state level should be avoided; but general guidelines for critical and fragile resources should be carefully worked out by many participants in a cooperative manner and then followed. Urban design and development patterns similarly should not be rigidly devised; but, again, general frameworks protecting resources and the natural setting must be agreed upon, leaving individual developments to make the most creative use of the land possible. Sub-state governmental units must be given the powers necessary to take control of growth and guide it into the most effective places. Design professionals must help others to see that such guidance is essential to continuing vitality. *Without it, Texas in the 1980s may blunder into the California position of unbridled growth followed by alarmed and excessive regulation followed by economic retrenchment.*

Will Texas become, as Larry McMurry has put it, "a sort of kid brother to California, with a kid brother's tendency to imitate?" Or will a distinctly new American subculture evolve, as Stevens hopes, "based on a fresh mixture of beliefs and attitudes? The chief ingredient of such a blend might well be the traditional frontier values."

The key to quality growth in Texas in the coming decade may, indeed, be found in the positive frontier values; but a note of caution should be sounded. The technological advances which now make possible tertiary recovery of oil, for example, can be viewed as the positive result of individual determination and inventiveness fostered by a competitive economy, as long as responsibility for accompanying environmental quality is included as a goal. If such an attitude of responsibility is omitted, however, our history of exploitation with its accompanying destructiveness may predominate. A growth economy tends to reward short-term gain through increased opportunities for exploitation. Buckminster Fuller's point is appropriate: "When I look at the total resources and design of the planet, my big question for the '80s is whether the conditioned reflex of humanity can be altered so that we can

get away from the competitive idea, the survival of the fittest."—*Newsweek*, November 1979.

The writings of both Fuller and Dubos suggest that the "fittest" who survive a degraded and dehumanizing environment may have lost the capacity for sensitive response and social interaction. Our goal, therefore, must be to provide environments which support our human and social needs in the greatest possible variety. We can achieve this quality if we can develop a new sense of cooperation, building on a resurrected spirit of frontier neighborliness.

Excerpts from Essay Number Six: "Architectural Education for the 1980s"

By James R. Pratt, FAIA

The schools should produce what ideal architect in the eighties?

Neither laymen nor professionals have a clear image of the personality and life of Lavoisier, except that he did something important in science, but many laypeople and we architects have clear images of Fuller, Wright, Stanford White, Adam, Bernini and Michaelangelo. Perhaps the reason is not only their strong personalities, but also the breadth of their interests and achievements. Architecture as a profession allows those who grasp its possibilities to range at will from the arts through the sciences. Someone said: "Anytime one peels away the chaff to look for theories behind some aspect of architecture, one winds up with the theories of another profession." If one attempts to enumerate all of the qualities that the title "architect" is supposed to imply, one comes up with a list of incredible diversity:

An architect is

- one who knows about every chemical and physical property, every process of manufacture, every chemical used in construction, in order to set buildings on the earth safely, span space safely, prevent decay from the elements, provide artificial air, light, power, audio and other environmental systems within buildings, and maintain the environments that have been created;

- one who understands the processes of assemblies of construction;
 - a resource for all the properties of equipment related to buildings, and for locating the equipment;
 - a financial advisor on costs and methods of financing construction.
- He must be
- knowledgeable on all the ramifications of the law as applied to construction agreements;
 - an ecologist to protect our environment from our acts of building, and lead us to define our relation to nature in our real self-interest;
 - an authority on bureaucratic requirements for a safe building for society;
 - a "psychologist-sociologist-cultural historian" who knows how to relate human activities to buildings;
 - an artist to move men's minds at the building scale, large or small, at the interior room scale, at the multi-building urban design scale;
 - a super-communicator, articulate and literate, able to draw, to manipulate complex informational tools, and able to work fluently in at least two, better three, languages;
 - a creative designer who can both analyze and synthesize into physical order myriads of factors important to the client, from door knobs and parking lots to electrical control systems of sunshades, security systems, videotape machines, autoclaves and human or product movement—and do it damn quickly;
 - a leader/coordinator/broker of specialists in design of new construction, and in the preservation of old construction;
 - one who understands power and the mechanisms of corporate and governmental bureaucracies;
 - a futurist who can anticipate what will be needed.

As my secretary commented after my dictating the above, it is discouraging to anyone entering a school of architecture. Can one man still do all of these things? The answer is obviously "no." Can one man coordinate all of these things with some knowledge of all of them? That answer can be "yes" if he has the right sort of education.

Our schools need to educate persons who are *specialists* in one or more of the above listed roles with extreme depth in their knowledge, and *generalists* to keep in perspective the work of numerous experts in specific fields. Neither of these is superior to the other; they are the yin

and yang of our whole need. The question is how to provide this professional education for both.

What do we need?

With exceptions, schools of architecture in Texas today serve most students on a "local-availability" basis; other students on a least-cost basis; fewer on a choice-of-curriculum basis; and a very few on a basis of intellectual attainment. We are going to have to add a new tradition of disciplined minds and even of scholarly attainment to back us in the practice of the eighties. A major need for offices is students trained with *disciplined rigor* in both pre-professional and professional education.

I happen to think that there are able students, programs and faculty in Texas architectural schools. Strong qualities in Texas students must not be underestimated. A Cornell professor visiting Texas three years ago told me that he was impressed with the openness, eagerness, and continued belief in the work ethic of Texas students, as contrasted with his own more culturally privileged and jaded ones. But eagerness and commitment are not enough.

There are serious questions about the availability of distinguished programs in most schools of architecture in the state of Texas. I have had personal experience with the failure of recent Texas graduates' ability to think. We practicing professionals need better-educated graduates to work with us.

We should be producing buildings here that compete on a world scale, irrespective of time. But by and large our schools and our practices are local and regional. Even though numbers of us have designed buildings over the United States or in foreign places, it is time we overcame our provinciality. Texas needs a higher level of vernacular buildings and a few Parthenons, both to be generated *here*, not in California or London. For it is we Texas architects, not the itinerant New Yorker, who must in the long run give our state its unique sense of place.

What kind of general education do professionals need?

How do we get architects who are more literate in both the narrow and broad sense of that word?

According to the "Guidelines for the Distribution of Studies" (from the 1979-80 Yale College Catalog), an educated man or woman

- should be able to express himself clearly in his own language in speech and writing; (Without an adequate

"We are going to have to add a new tradition of disciplined minds and even of scholarly attainment to back us in the practice of the eighties. A major need is students trained with disciplined rigor in both pre-professional and professional education."

vocabulary, one cannot communicate even with one's self about any subject, verbal or visual.)

- should study English literature in order to understand our culture; (which certainly includes an understanding of how architecture can arouse men's passions, support or inhibit life, and provide a rich diversity which is our profession's reason for being)
- should be able to read and write a language other than his own; (At the most pragmatic and commercial level, how much more effective I could be with my German supplier if I could address him in his language, or with my French research assistant if I spoke French. Also, I can understand my own language better through my knowledge of other languages—and subtlety of mind proceeds therefrom and leads even to subtlety in architectural concepts.)
- needs to gain historical perspective in order to understand his own culture; (We get some of this in our study of ancient architectures. What we do not normally get is their reason for being—which prevents us, in part, from formulating solid reasons for what we do as professionals.)
- needs to understand mathematical concepts that underlie many fields of study; (including aspects of architecture)
- needs to become acquainted with one of the natural sciences; (The application of the scientific method of problem-solving in architecture needs to be taught to enable us rigorously to attack problems.)
- should know something of the social sciences in order to find out what men know about living together; (In the last two decades, the relationship between architecture and social science has become markedly visible.)

What is not in this list of the undergraduate Yale Catalog is a requirement for visual literacy as a part of every edu-

cated person's knowledge. Certainly professional architects must have a strong ability to apply the principles of visual art to architecture.

In summary, the understanding of the relationship of man to his environment—visual, psychological, physical, ethical—is important to being an effective practitioner and may be increased through the study of our own and foreign languages and literature, history, mathematics, science and social science, and the visual arts.

How are we going to get prospective architects into our offices who can read and write?

Last fall we turned over to a recent graduate of one of our Texas schools the writing of a report for our firm. It came back gibberish. The cause of his shallow design work became more clear; he possessed facile talent in drawing, but lacked the thinking skills to harness it. His inability to structure thought showed him as cheated in his schooling, probably before college, but that is no excuse for a university to allow such a candidate to hold a professional degree. In checking with other offices, this problem shows up often. Even though students enter with high SAT scores and some proficiency in writing skills, one dean commented that they leave less well-skilled than when they arrive. Is continuing practice in writing a necessity?

A larger percentage of students now enter Texas architectural schools who have prior other degrees. Of *graduate* students entering one college of architecture with no prior architectural education, the best students in design have proven to be those who received their prior degree in English. This may seem a surprise until we remember that if we cannot render our thoughts into words, we cannot communicate with ourselves clearly about new concepts. Precision in subtlety of mind comes from mastery of language.

One learns to write also through ample reading. The value of reading communicated to students by the professional schools needs reinforcing. To give some perspective on the quality of the Texas schools, which includes the amount of reading done, I have called for a print-out of information on our six schools, now being gathered annually by the National Architectural Accrediting Board, in order to compare this with information on 14 other schools. The latter include ones with national reputations, together with representative state-supported schools from all geographic sections of the coun-

try. The particular choices are mine, with the help of N.A.A.B.'s Hugh Blasdel, and are arbitrary; they were chosen in ignorance of what information the computer might hold. Not all institutions turned in data for every question; after study, I concluded that even with errors and omissions, the print-outs show a consistent pattern in comparisons. The comparisons are surprising and of real concern.

Comparison List:

University of California, Berkeley; Cornell University; Georgia Institute of Technology; Harvard University; University of Illinois, Urbana; Massachusetts Institute of Technology; University of Minnesota; University of Oregon; University of Pennsylvania; Princeton University; University of Virginia; Clemson University; Arizona State University; and University of California, Los Angeles.

Texas Schools:

Rice University, University of Texas at Austin, Texas A&M University, Texas Tech University, University of Houston, University of Texas at Arlington.

(Note: Due to space limitations, we are able to include here only the following brief summary of findings which we have drawn from the extensive table presented in the author's original essay. His findings were based on library statistics reported to the National Architectural Accrediting Board within the past three years.—Editor). On the average, the Texas architectural libraries, compared to those in the national sample,

- circulated only about a third as many volumes and also reported *owning* about a third as many;
- acquired less than half as many new volumes and reported subscriptions for less than half as many periodicals;
- had only half as many reader stations and operated on a library budget (per full-time equivalent student) only 1/6 as large;
- were allotted 1/5 as high a percentage of overall school budget (9.7 percent vs. 2.1 percent).

How do we eliminate parochialism in schools of architecture?

Parochialism may be defined as an ignorance of, and perhaps a willful blindness to, the rest of the world. Its elimination does not mean the abandonment of local culture, or even the adoption of national culture. In architecture, we need the stimulus of other viewpoints to help us enrich our buildings. It is humbling to see architectural products superior to our own in places like India or Turkey.

"In architecture, we need the stimulus of other viewpoints to help us enrich our buildings. It is humbling to see architectural products superior to our own in places like India or Turkey."

Not many students in Texas schools of architecture realize how few of the really good buildings of the world are in this region. They do not know enough about the world. I do not sense that they get in school the stimulus to find out about it. From the evidence of interns from Texas schools coming through my office in recent years, I construe that the attitudes they emulate are narrowly visual. The internationalism of architecture needs to be communicated to students in its economic, technical and social contexts as well as in superficial visual ones, and by an educated faculty.

How do we bring poetry back into the flesh of architecture?

I see a need for schools emphasizing technical specialization, science-based, as a resource to practitioners and as a training ground at the graduate level. And we need several schools uniting architecture with related arts at the small scale. I cannot find where industrial design is taught in Texas. There is at present no school with a really strong arts relationship which could produce a cadre of professionals similar to those who came out of Cranbrook in the forties. Architects' training in interior architecture in Texas is weak, which leaves the field to those picking products from catalogs, in home economics departments, or to those schooled elsewhere. I recently asked two well-known Finnish designers how came their high-level, strong coherence of product design, fabrics and craft design with art and architecture. Their answer was that they all went to school together, they each had to take rigorous courses in the other's crafts, and that the milieu was small enough that they all knew each other.

What are ways to strengthen the learning environment?

A social and physical structure modelled on the Cambridge-Oxford "house" might be an effective educational mechanism to foster a working peer group. Is it fifty or sixty percent of our learning that we

derive from peers rather than pontification? In large amorphous state universities, there are no substructures between the individual and the mass other than the class level. There is ample precedent in this country in such liberal arts colleges as Yale for the use of this structure. Even without the physical house, an organized subgroup monitored by appropriate faculty offers a way to broaden students' interests, especially at the lower levels.

Below are what I consider to be some salient questions:

What is the best way to inculcate analytical skills among students of architecture? Is the performance of many students in this area meagre because too many skills are addressed at once?

Is the studio method the best way to teach design?

What part should hands-on construction play in training architects?

When should office apprenticeship begin in the learning process? Why should apprenticeship be a formal requirement for graduation from an academic institution, as is now required in the graduate program at Rice?

Why should academic credit be given for a preceptorship when the experience must vary enormously from office to office for any given student? Great gaps and omissions are sure to occur because of the fluidity of the professional response to the market. I am not against preceptorships but, rather, against academic credit for them since the experiences afforded are unpredictable.

What standards should be maintained for class size in lectures, in studios, at the different undergraduate and graduate levels? I am for smaller size at the beginning rather than at the end when students should be more on their own.

Do we need to find more money for our state schools?

The national comparisons all indicate that we need to upgrade the *financial resources* for the state-supported professional schools if we are going to compete nationally. We have an uphill battle in the kind of shrinking economy we face in the next decade, yet those five schools need endowed chairs, scholarships, and especially, *lower student/professor ratios*.

At first glance salary scales do not look so bad, comparing the 14 national schools with the six Texas ones. The catch comes, however, in that Texas teachers must either work a great deal harder to serve their student load, or Texas students get a great deal less attention from faculty than does the national

sample. In dividing the salaries per full-time equivalent student (F.T.E.S.) the national average dollar per F.T.E.S. was \$1,700, but only \$1,200 for the six Texas schools. Administrative expenditure per F.T.E.S. averaged about 90 percent more for 13 national schools than for five Texas ones. We need to examine our own values of what we are willing to spend on education.

"Formula funding" may so far be the most democratic way found for schools in Texas to receive equal treatment. The process is one whereby the Coordinating Board recommends levels of funding based on complex formulas to the Legislative Budget Board and Governor's Budget Committee. These levels are normally modified and finally accepted by the Legislature. Some dozen categories of subject areas receive differing amounts of money on a unit basis, based in theory on the cost of teaching in that discipline. This year's unit basis recommended by the Coordinating Board for the category of salaries for engineers and architects is \$52.75; for fine arts, \$58.01; and for nursing, \$89.50 per credit hour taught. The TSA should undertake to convince the Coordinating Board that architecture is a more complex and costly subject to be taught than fine art, not a less costly one, and therefore should be placed at a higher category of funding than any other fine art.

How can all geographic areas come to have needed professional school support?

Although it will be difficult to accomplish, we need to work at organizing our resources so that all geographical areas have needed professional school support. As a student at Harvard, I benefited greatly by taking courses at M.I.T. and by having some M.I.T. professors lecture my classes at Harvard. It was a two-way street. The University of Houston is perhaps better because of Rice and presumably the relationship will grow as the institutions mature. Can this Macy-Gimbel principle be applied in future planning to fill out other needs in three other geographical areas? Should a strong technical school be added in San Antonio to pair with the University of Texas' interest in soft sciences? Should a second school in the Dallas/Fort Worth area complement nascent UT Arlington and fill out needed other programs? An institution at UT Permian Basin might be paired with the school at Lubbock. In order to make this idea realistic in a constricted economy, each existing school to be paired could be reduced by half.

From my perspective, this would greatly strengthen the quality of education in all schools concerned, but of course would be politically difficult to bring about.

How can we establish local control for each school?

Another recommended course of action is to encourage the legislature to give each state university its own board of regents composed of men distinguished in those disciplines taught in that university.

Such a move would

- provide each university with closer supervision than present arrangements can possibly give;
- make it possible to place a leading architect on the board of regents of each of the five state universities teaching architecture;
- make possible continuing informal and formal contact between the architect-regent and the dean of that school of architecture. In fact, periodic meetings attended by the deans and regents from the different boards might be illuminating to all concerned.

Such a move would also eliminate portions of the expensive "systems" offices.

Our goal must be to bring the legislature, the regents, the professionals and the academics together so that each can inform and assist the other; and to eliminate the stifling effects of bureaucratic layers on architectural education by restoring local control to each state university.

Pie in the sky? This is not as big a change as that undergone by the British 20 years ago when they abandoned hundreds of years of tradition by abolishing the Board of the Admiralty. It just takes political backing.

Note: The author would like to acknowledge the valuable contributions of Charles Green, former Dean, College of Liberal Arts, University of Texas at Arlington, who served as a "most helpful sounding board."

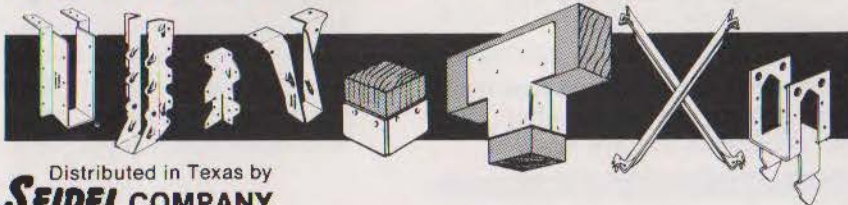


Catherine Powell is an assistant professor in the Department of Urban Studies at Trinity University in San Antonio. James Pratt, FAIA, is a principal in the Dallas firm Pratt Box Henderson & Partners.

Strong-Tie
TIMBER CONNECTORS

SIMPSON COMPANY

JOIST HANGERS • POST BASES
POST CAPS • FRAMING ANCHORS
HEADER HANGERS • TIE STRAPS
WALL BRACING • FRAMING CLIPS
METAL BRIDGING



Distributed in Texas by
SEIDEL COMPANY

4110 Dumbarton Road • Houston, Texas 77025 • 713/668-8554
Manufactured by Simpson Company, San Leandro, California 94557

Circle 29 on Reader Inquiry Card

**brayton
international
collection**



lario

walter k collection

headquarters: p.o. box 2558 high point, n.c. 919/434-4151

dallas: timco associates, 2702 mckinney 214/747-7130
houston: timco associates, 3333 eastside street 713/523-4900

Circle 28 on Reader Inquiry Card

In the News, continued.

Projects in Progress



Lone Star Brewery, San Antonio.

Lone Star Brewery Slated for Rebirth As San Antonio Museum of Art

The turn-of-the-century Lone Star Brewery in San Antonio, built by St. Louis beer magnate Adolphus Busch, is slated for rebirth in March 1981 as the new San Antonio Museum of Art.

The \$7.1 million project, under the architectural direction of Cambridge Seven Associates, Cambridge, Mass. (Martin and Ortega Architects, San Antonio, associate architects), involves the renovation of 78,000 square feet of space to house the San Antonio Museum Association's art and archaeology collections.

Architects also are restoring distinctive design features of the modified Romanesque complex: exterior masonry, arched windows, decorative merlons, columns, and high ceilings and open spaces which make the brewery especially suitable for reuse as a museum.

New features will include a glass-enclosed skywalk which will connect the two towers of the main structure. Skylights will illuminate the main entry area, and a landscaped park area will surround the entire complex.

In addition to its existing facilities, according to SAMA, the new San Antonio Museum of Art will provide the city with one of the largest museum systems in the United States.

Church Addition Under Way in Houston

An established inner-city congregation in Houston wanted to build a new worship space to accommodate growth and to provide for more flexibility in liturgical and community programs. To that end, architects of the Houston firm Charles Tapley Associates designed a 5,900-square-foot

**If someone tells you
they sell a waterproofing material
with a lower permeability rate
than Vaporseal,
tell them they're all wet.**

| PROPERTIES | VAPORSEAL | MODIFIED ASPHALT | VINYL SHEETING | POLYURETHANE |
|---------------------------|------------------|-------------------------|-----------------------|---------------------|
| MOISTURE VAPOR BARRIER | EXCELLENT | GOOD | FAIR | POOR |
| MICRO-ORGANISM RESISTANCE | EXCELLENT | FAIR | POOR | GOOD |
| CHEMICAL RESISTANCE | EXCELLENT | FAIR | GOOD | FAIR |
| CRACK BRIDGING | EXCELLENT | FAIR | GOOD | GOOD |

1. Simple, cold installation.
2. Excellent physical properties.
3. Factory controlled gauge.
4. Cost-effective life cycle.
5. Performance guaranteed.



Send for this free brochure giving you even more reasons for selecting Vaporseal for your next job.



The Noble Company

South Texas—Jim Stephenson & Assoc., Inc.
P.O. Box 13180, Houston, TX., 77019. (713) 526-3671.

North Texas—GFK Sales Company
P.O. Box 47093, Dallas, TX., 75247. (214) 630-5637

Solar Control

Means Cutting Energy Consumption.

To help control energy costs, building & home owners and operators are utilizing Sun Screen by Phiferglass. These fiberglass fixed shades attach to the outside of the window serving as a year round insulation blanket. In summer, for example, they can reduce the amount of solar gain by as much as 70%.



Maintenance-free Sun Screen also adds privacy and a look of architectural uniformity. Strong. Durable. And backed by Phifer's 25 years of dependability.

For complete technical assistance, energy saving worksheets and information call or write:

Southwest Solar Screen, Inc.
6628 Rampart/Houston, Texas 77081
(713) 988-9504



Circle 32 on Reader Inquiry Card

Au Forgeron De La Cour-Dieu, Inc.

Astie Art Metal Studio

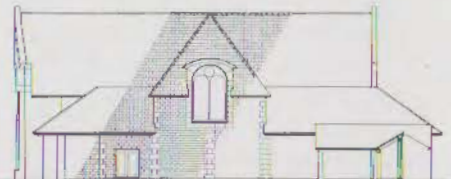
Two Generations of Experience Beautify the Inside and Outside of Houses with Hand Forged Ornamental Iron
RESIDENTIAL ■ INSTITUTIONAL ■ COMMERCIAL

Antique Reproduction
Antique Restoration
Sculptures

211 W. Comstock St.
Dallas, Texas
(214) 748-3983



Circle 31 on Reader Inquiry Card



Lutheran Church, Houston (west elevation).

addition to respond to the style and materials of the existing Christ the King Lutheran Church, a small "Normanesque, Proto-Gothic" stone structure.

A cloister-like court with a similarly-scaled arcade ties the smaller existing structure with the larger addition. The new nave is basilican in section, with a crossing developed in the roof without forming transepts in plan. The three-stage roof form is intended to bring the high ridge down to the human scale of the cloister arcade. Touches of English Baroque in the curved north facade and the crossing windows are to imply "additive growth" over time in a vocabulary that is compatible with the existing building.

The project is scheduled to be completed in late 1981.



Guest Quarters West, Houston.

Guest Quarters West Under Construction Near Galleria in Houston

Construction is now under way on the 26-story Guest Quarters-Galleria West hotel on Westheimer one block west of the Galleria in Houston, designed by the Houston office of Skidmore, Owings & Merrill.

The new Guest Quarters, similar to the existing Guest Quarters hotel on South Post Oak Road in Houston, will consist of 301 one-bedroom suites with private balconies, 48 two-bedroom suites, six



More people are turning to asphalt every day.

And why not? Hot mix asphalt pavement is the most sensible surface choice available today.

It's versatile, durable, economical, and it looks great too.

That's important. Because often it's the first impression people have of your office or shopping center. And an unpaved or poorly constructed parking area can be a deterrent for prospective customers and previous ones alike.

What is hot mix asphalt?

It's a mixture of dried and heated quality aggregates combined with hot asphalt cement. And when properly applied, while still hot, to required thickness and grade specifications, hot mix asphalt provides a quality surface at a less than premium cost.

How good is that?

Some full depth pavements constructed back in 1889 are still in use. That's how good.

Suitable for almost every type of subgrade, full-depth asphalt construction provides more strength per inch of thickness than any other type of pavement structure too.

And that means lower maintenance costs.

For a list of the quality full depth hot mix asphalt dealers in your area, contact the Texas Hot Mix Asphalt Pavement Association.

Or for more information, send for our full depth asphalt design and construction guide.

You'll start turning to asphalt too.

**TEXAS
HOT
MIX
ASPHALT
PAVEMENT
ASSOC.**

305 Perry-Brooks
Building
Austin, Texas 78701
512 477-1824



In the News, continued.

meeting rooms, a lounge and a swimming pool.

A grove of trees will accent the Westheimer entrance to the hotel, which will be approached via a private tree-lined street linking Westheimer Blvd. and West Alabama Road. The entrance to the hotel will feature a cloister-style courtyard, which will be landscaped to create a "totally separate environment" from the activity of the nearby streets.

The building itself will be a series of "sculptured curves" and linear patterns of Texas Imperial brown granite aggregate and solar bronze windows. The

roof will be capped with a rolled vault to complement the curved walls of the exterior. The two-story lobby will feature a marble wall and grand stairway leading to a lounge on the second floor.

Construction is scheduled to be completed in early 1982.

Plans Announced For Restoring Historic Houston Bank

The Houston development firm Todd-Moore Properties has announced plans to restore and convert the 52-year-old



Houston National Bank Building.

Houston National Bank building at the corner of Main and Franklin Streets into downtown Houston office space.

Restoration work, under the direction of the Houston firm Harvin Moore & Barry Moore Architects, will include repairing the building's 56-foot-high fresco and bronze rotunda ceiling and preserving its massive 47-foot by 108-foot lobby.

The exterior of the 44,700-square-foot building is constructed of black granite, Bedford limestone, bronze and plate glass. Eight fluted columns, five feet in diameter and 35 feet high, support the building's elaborate cornice, which is similar to the cornice on the Lincoln Memorial in Washington, D.C.

The bank building was originally designed by the Houston firm Hedrick & Gottlieb and built in 1928. In 1975 it was added to the National Register of Historic Places, which describes it as "an excellent example of Neoclassical Doric architecture—symbolic of the wealthy banking interests in Houston during the twenties."

News of Schools

'Full Pardons' Promised For Return of Hilton Hotel Souvenirs

A University of Houston professor of architecture has offered "full pardons" to sticky-fingered hotel guests for returning Hilton Hotel memorabilia for use in restoring the 64-year-old Mobley Hotel in Cisco, the first Hilton Hotel.

Dr. Rinaldo Petrini, architect in charge of the restoration project, says that anything that relates to Conrad Hilton or his hotels—towels, silverware, ashtrays, menus, receipts, bills, old photographs—will be used to authenticate individual rooms in the Mobley.

The rooms will trace the history of the American hotel industry, with the decor of the late 1700s, the typical stagecoach

Simple. Commercial and residential vinyls, suedes, wood veneers, corks, handprints, grasscloths, linens, wools, and other fabrics, leathers, chrome, brass, and copper laminates, flexible mirror tiles, carpets for the wall, custom wall coverings, and much more.

We cover it all. It's just that simple.

Wallpapers Inc.
Of Houston/Of Dallas

CAROUSEL DESIGNS • CARLTON WALLCOVERING • CHEMETAL
CORK PRODUCTS CO. • DECOR INTERNATIONAL • EUROTEX • EXPANKO CORK
HAMILTON ADAMS IMPORTS • JOHN RAISIN • LAMINATING SERVICES
LAWRENCE PLASTICS • LEONARD HANDPRINTS • NATIONAL PRODUCTS
NILS ANDERSON • NORTHERN CALIFORNIA IMPORTS • PEACOCK PAPERS • VESCOM
WALLCOVERINGS UNLIMITED • WALLPAPERS INC. (OAKLAND) • WALLS ALIVE • WINFIELD

Wallpapers, Inc. of Houston/Of Dallas
8110 Richmond, Houston, TX 77057 (713) 781-5510
P.O. Box 31318, Dallas, TX 75231, (214) 739-2490

inn, a Victorian interior, a Mobley room of the 1920s, a typical Hilton Hotel room in 1946, a contemporary room circa 1982 and a futuristic room.

The Mobley was built in 1916 and purchased by Conrad Hilton in 1919, marking the beginning of the Hilton Hotel chain. Curators of the restored hotel, scheduled to open in 1982, will be the University of Houston Conrad Hilton Hotel and Restaurant Management College.

Contact Dr. Petrini at UHCC College of Architecture, 4800 Calhoun Blvd., Houston 77004. Telephone: (713) 749-4256.

Raymond Reed Resigns As Texas A&M Architecture Dean

Professor of architecture Raymond D. Reed has resigned as dean of the Texas A&M College of Architecture and Environmental Design to return to full-time teaching.



Raymond Reed

Charles Hix

Reed had served as dean of the college since 1973. Before that, he was an associate professor and chairman of architecture and interior design at the University of Southwestern Louisiana (1960-64), professor and head of the department of architecture at Iowa State University (1964-70) and professor and coordinator of graduate architectural research and design at Iowa State (1970-73).

He received his bachelor's degree in architecture from Tulane University in 1953 and his master's degree in architecture from Harvard in 1958.

Reed's interim successor as dean of the college, Dr. Charles M. Hix, PE, a professor of architecture, building construction and civil engineering, has taught at A&M since 1968. He received his bachelor's degree in civil engineering at Texas A&M in 1948, his master's degree there in 1951, and a doctorate in civil engineering from A&M in 1970.

Books

Between Silence and Light: Spirit in the Architecture of Louis I. Kahn, by John Lobell. Shambhala Publications, Boulder, Colo., 120 pages, \$7.95.

Author John Lobell, a professor of architecture at Pratt Institute in Brooklyn, N.Y., studied under Kahn as a student of architecture from 1959 to 1966 at the University of Pennsylvania. The experience was a rewarding one. "The way I was taught architecture," Lobell writes, "and the way Louis Kahn practiced it

brought architecture into a larger human context and brought a spiritual awareness more concretely into human culture in ways which are rare today. In this book I have tried to present a small part of this view of architecture as seen in Kahn's work."

The first book about Kahn for a general audience, according to the publisher, *Between Silence and Light* consists of three sections: the first, "Silence is Light," presents a selection of Kahn's own words taken for the most part from a lecture he gave in 1973 at Pratt Institute; the second section, "Architecture is



where there's a WALL...
there's a way.

above, dining table and wall bed simply fold up and out of sight when not in use. whether in a one bedroom apartment or a multi-room mansion, you can live better through the miracles of modular furniture manufactured by programme martin.



programme

martin

3601 west alabama, houston, texas 77027 (713) 961-1130

6833 san pedro, san antonio, texas 78216 (512) 341-4451

Balcones Office Park

PHASE 3 READY FOR LEASING

Now that we have completed phase one and phase two of Balcones Office Park, we are ready to lease space in our newest addition. This 5 story building will be ready for occupancy in January of 1981. Approximately 60,000 sq. feet of professional business environments are yours for the choosing.

Balcones Office Park enjoys an excellent location at MoPac and Northland Drive. As Austin continues to grow to the northwest, this prime location becomes more and more the center of

professional activity in Austin.

Ample parking spaces are provided for tenants and their clients at all times. And it's free. By pre-leasing needed space during the construction stage, special arrangements for customizing requirements for individual mechanical, electrical and plumbing needs can be held to a minimum.

For leasing information call
Jim Moritz, Realtor
(512) 451-7613

Mo-Pac at Northland, 3305 Northland Dr. Austin, Texas 78731

Balcones Office Park



Circle 37 on Reader Inquiry Card

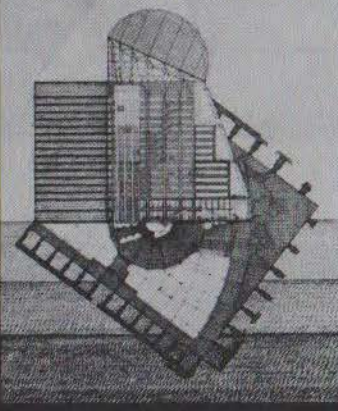
INLAND ARCHITECT

The Chicago and Midwest Magazine of the Building Arts

Continuing Chicago's
Internationally Renowned
and Celebrated
Architectural Tradition
Since 1883

SUBSCRIBE

Inland Architect



One year only \$15.00 Two years \$26.00

Bill me

International Subscriptions add \$3.00

Name _____

Mailing Address _____

City _____ State _____ Zip Code _____

Send to: Inland Architect, P.O. Box 10394
Chicago, Illinois 60610

Spirit," contains Lobell's thoughts on "Kahn's place in architectural history, on Kahn's insights, and on the human place in architecture"; the third, "Some of Kahn's Buildings," consists of photographs, plans and brief descriptions of eight of Kahn's buildings and projects, including the famed Kimbell Art Museum in Fort Worth.

Architecture in Context: Fitting New Buildings with Old, by Brent C. Brolin. Van Nostrand Reinhold Company, New York, N.Y., 160 pages, \$16.95.

Author of *The Failure of Modern Architecture*, published in 1976, Brent Brolin specifies and elaborates on one of those failures in *Architecture in Context*: the strong modernist emphasis on "spirit of the times" rather than "spirit of the place." Taught to contrast new and old, rather than make them visually compatible, Brolin writes, modern architects have been more concerned with making a personal "artistic statement" with a building than with enhancing its context. His thesis: regardless of whether a new building copies architectural features from its immediate environment or creates new ones, those features can and should establish a "strong and eloquent visual relationship" between new and old. To do this, Brolin says, architects can once again use design elements which modernism discarded long ago, such as ornament, and learn how to determine building relationships with the eye, not ideology. Also billed as a "how-to" handbook for architects and laypersons alike, *Architecture in Context* includes illustrations of exemplary building-contextual relationships in the United States and Europe as well as pointers on dealing with architects to "get what you want."

News of Firms

Minneapolis-based **Ellerbe, Inc.**, designers of the Mayo Clinic and the recently completed U.S. Navy Medical Center in Bethesda, Md., has established a Southwest regional headquarters in Austin. According to Ellerbe President Robert F. Jacobsen, the choice of Austin over other Texas cities was made because of "the city's refreshing quality of life which puts such value on its natural beauty and charm."

C. Jack Corgan, president and chief executive officer of the Dallas firm **Corgan Associates**, has been elected the

firm's chairman of the board. The advancement was made upon the planned retirement Aug. 1 of Jack M. Corgan, the firm's founder.

McKittrick Drennan Richardson and Wallace Architects, Inc. will now be known as **McKittrick Richardson Wallace Architects, Inc.** (MRW). O. E. Peck Drennan has left the Houston firm to start his own practice.

Dallas-based **Pickle Architects, Inc.** has relocated to Heritage Square, 5001 LBJ, Suite 200, Dallas 75234.

Dallas-based **SHWC, Inc.** has formed a new space planning department within the firm. Judy Schoenhals will direct the department and coordinate all space-planning projects.

Houston-based **3D/International** has appointed Gilbert E. B. Hoffman and Robert W. Peterson senior associates in the firm's architecture division. Gary Boyd has been appointed a senior associate in the interior architecture division. New associates in the architecture division are Mark E. Gustus, Richard W. Moore, A. Matt Roesler, Roddy W. Simmons and Alfonso Varela. Scott Ballard is a newly appointed associate in the planning department. In upper management promotions, Charles E. Burgess, Richard L. Kreutz, J. Russell Laird Jr., John E. Pearson and L. Herbert Rather have been named senior vice presidents, along with Thomas P. Hughes at the New York office. Appointed vice presidents were Daniel R. Brents in Houston, Kevin D. Dallas in New York and Ronald D. Schappaugh in Riyadh, Saudi Arabia.

The Richardson firm **James H. Meyer & Associates** has named John Mark Hutchings an associate of the firm.

Lockwood Andrews & Newnam, Inc. (LAN) of Houston has added California-based Carter Engineers as a subsidiary to their organization. It is the second out-of-state expansion for the firm in the last two months.

Paul C. Crews Jr. and Craig A. Estes have been appointed associates of **Wilson Stoeltje Martin, Inc.**, in Austin.

Charles R. Womack & Associates of Dallas has added Thomas F. Schifer as an associate of the firm.

Houston-based **Sikes Jennings Kelly** has moved to expanded facilities at Brookhollow Central Two, 2900 North Loop West, Suite 1301, Houston 77092.

Hatfield Halcomb Architects of Dallas has appointed Pat Darnell director of the firm's interior design division and Ann Mouzon as business development coordinator.



The 1980 NCARB Architectural Registration Handbook

The only book created expressly to help you prepare for the Professional Exam —

The same authorities who wrote the test have filled the new **Handbook** with vital information on the December exam. No other guidebook offers the following basic exam data: **The Official Mission Statement** (A full description of the 1980 exam subject: design of the home office of a large insurance company situated on a 500-acre site in a "classic" suburban setting); **what you should know about grading**; **a condensed version of last year's exam**; **recommended readings**.

The valuable study information is yours for only \$30.95, which includes \$1.35 state sales tax and postage. Payment must accompany all orders. No phone orders. Allow 2-3 weeks for delivery.

Order from the Texas Society of Architects/2121 Austin National Bank Tower/Austin, Texas 78701/(512) 478-7386.

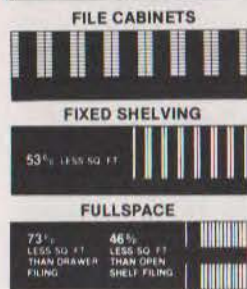
Circle 39 on Reader Inquiry Card



CERAMIC DESIGN
HANDMADE CERAMIC LIGHTS
342 W. SUNSET SAN ANTONIO, TEXAS 78209 512/824-5572

Circle 38 on Reader Inquiry Card

...why FULLSPACE[®]???



Specify FULLSPACE and cut the areas reserved for 4-drawer filing in half! Cabinets of shelving on movable carriages roll left or right to open *one* access aisle. FULLSPACE performs equally well in stockrooms, libraries, pharmacies, etc. Guaranteed installations by factory-trained personnel. Ask for free literature, case histories, layouts, estimates and specs.



LUNDIA OF DALLAS/FT. WORTH
11311 Harry Hines Blvd.
Dallas, TX 75229
214/241-3481

LUNDIA OF HOUSTON
P.O. Box 55372
Houston, TX 77055
713/467-1982

LUNDIA OF SOUTH CENTRAL TEXAS
1600 Rio Grande
Austin, TX 78763
512/478-8299

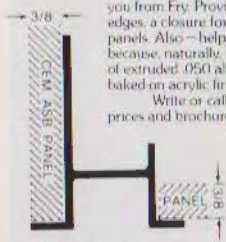
Circle 41 on Reader Inquiry Card

NEW FROM FRY FOR '80!

PANEL DRIP MOLDING (PDM-375-875)... for Cement Asbestos Panels

Another added sales potential for you from Fry. Provides for clean, sharp edges, a closure for vertical or horizontal panels. Also — helps stop panel stains because, naturally, it's a drip mold! Made of extruded .050 aluminum with clear, baked-on acrylic finish.

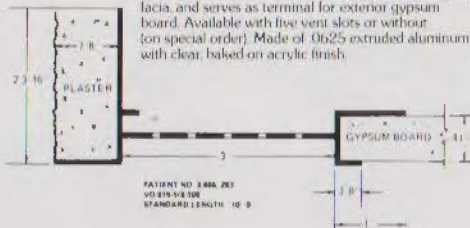
Write or call today for samples, prices and brochures.



PATENT NO. 3,486,283
STANDARD LENGTH 10' 0"
PUNCHED 8" O.C. FOR FASTENING

VENTED DRIP SCREED (VD-875-5/8-300)... For Gypsum Board Soffits

Now we have a special new 3 in 1 molding for gypsum board! New sales for you. Advantages make it a sell seller — helps end soffit stains, more than meets code requirements, serves as plaster screed for lacia, and serves as terminal for exterior gypsum board. Available with live vent slots or without (on special order). Made of .0625 extruded aluminum with clear, baked-on acrylic finish.



PATENT NO. 3,486,283
VENTED DRIP SCREED
STANDARD LENGTH 10' 0"

Samples and a complete catalog are available upon request. Please contact:
Doug Harper Manufacturers Representatives, Inc.
P.O. Box 5202/Shreveport, LA 71105
(318) 868-1289

FRY REGLET Corporation

625 S. PALM AVENUE, ALHAMBRA, CALIFORNIA 91803 (213) 289-4744
MAILING ADDRESS P.O. BOX 2251, ALHAMBRA, CA 91803

Circle 40 on Reader Inquiry Card

Workshops

TSA to Host Professional Exam Seminar During Dallas Annual Meeting

The Texas Society of Architects, in conjunction with TSA's 41st Annual Meeting, will host "A Seminar for the TBAE/NCARB Professional Exam" from 9 a.m. to 4 p.m. Nov. 6 at the Hyatt Regency at Reunion in Dallas for persons planning to take the registration exam in December.

Seminar faculty will include NCARB Executive Director Sam Balen, FAIA; Robert Norris, Part I coordinator on the NCARB exam-writing committee; NCARB exam coordinator Sid Frier, FAIA; TBAE Chairman Doug Steinman, FAIA; and TBAE Executive Director Phil Creer, FAIA.

Fee for the seminar is \$20. For more information, contact the TSA office, 2121 Austin National Bank Tower, Austin 78701. Telephone: (512) 478-7386.

The Texas A&M College of Architecture and Environmental Design also will host an "Architecture Review Workshop" for persons preparing to take the December exam. The workshop will be divided into two sessions—from 6 to 10 p.m. Friday, Nov. 14, and 8 a.m. to 8 p.m. Saturday, Nov. 15—and will cover parts I through IV of the registration exam.

The fee for the workshop, which is limited to the first 100 registrants, is \$45. For more information, contact Gordon Echols, Texas A&M College of Architecture and Environmental Design, College Station 77843.

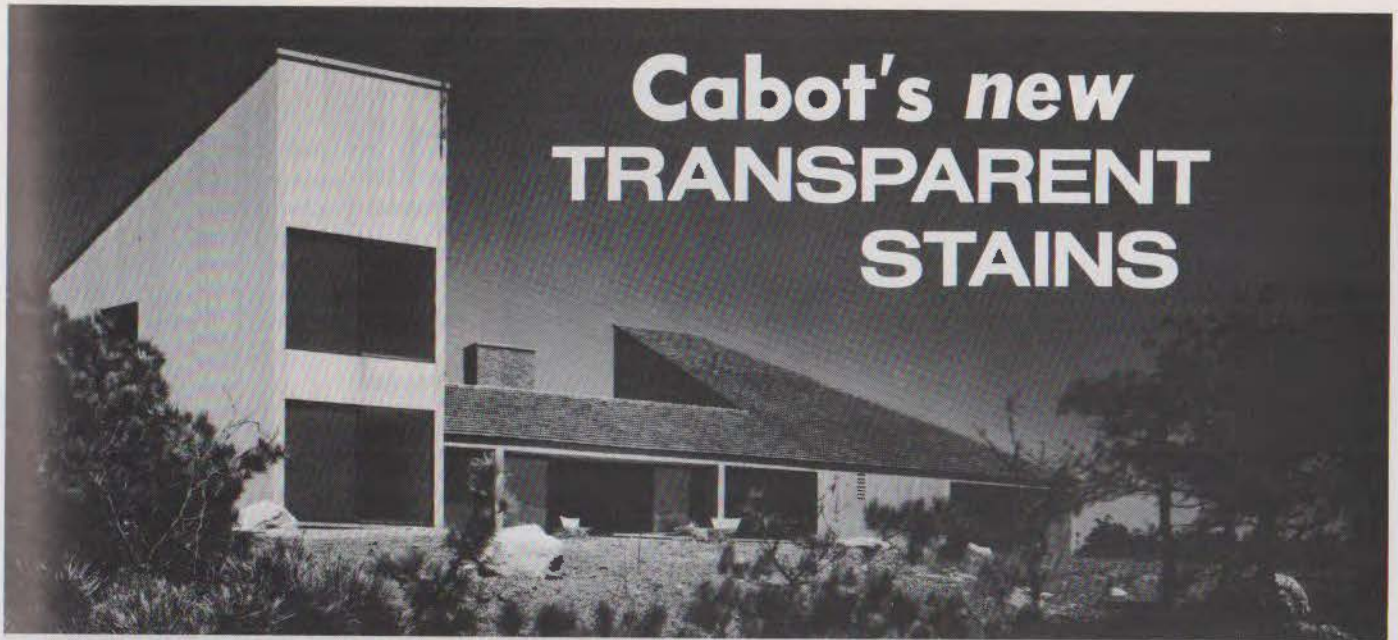
"Passive Solar Energy Conservation,"

a two-day workshop on the intricacies of passive solar residential design and systems, will be held Oct. 24-25 at Midwestern State University in Wichita Falls, sponsored by the UT-Austin School of Architecture and the Wichita Falls Chapter AIA.

Topics include energy conscious design principles, passive solar economics, passive cooling, and performance of existing passive solar systems.

Workshop faculty will be David F. Smith, adjunct assistant professor of architecture and planning, and Michael Garrison, assistant professor of architecture and planning, both faculty members of the UT-Austin School of Archi-

Cabot's new TRANSPARENT STAINS



East coast home: Architect James Walker, Boston, Mass. Cabot's Stains on exterior and interior wood surfaces.

Naturally beautiful for wood... the stain that shows the grain.



Cabot's new Transparent Stains bring out the best in wood, produce rich, lively colors in a variegated effect depending on the porosity of the wood surface and the exposure. These new stains accent the beauty of wood grain and texture, beautify in a choice of 28 colors. Like other stains in the Cabot line, Cabot's Transparent Stains will not crack, peel, or blister... are applicable to all types of wood.

Cabot's Stains, the Original Stains and Standard for the Nation since 1877

Samuel Cabot Inc.

Bute Colorizer
712 W. Laurel/San Antonio/(512) 223-4234
Central Supply
Box 1660/San Antonio/(512) 227-8101
Central Texas Decorating
5501 S. Congress/Austin/(512) 444-6869

Circle 43 on Reader Inquiry Card



Rustic Terrazzo: Combining the safety of stone with the beauty of color.

In the 15th century, terrazzo was born as a building art form as Venetians sought an attractive, long-wearing, weather-resistant material for use on the terraces of their homes.

Called "Rustic" Terrazzo, it provides all the strength and beauty of any terrazzo flooring, plus the added advantage of a safe, non-slip surface.

Basically, Rustic Terrazzo consists of carefully selected aggregate chips mixed with portland cement paste and spread evenly over a concrete base. It is then troweled, rolled, washed, and left to harden. Unlike indoor terrazzo, it has a rough, dense raw-stone surface. It may contain quartz, granite or gravel aggregate as well as certain types of marble chips.

Rustic Terrazzo provides beauty and safety for all types of building entrances, on stairways and sidewalks, and in plazas and malls. It is an ideal all-around answer for pavements where good traction is needed—and where beauty, durability, safety and low-cost upkeep are crucial.

Designed for use in any climate, Rustic Terrazzo with air-entrained concrete precludes surface deterioration in any weather.

As with indoor terrazzo, styling is a matter of imagination—indoors and outside, or as an accent for any surface, horizontal or vertical.

terr a z z o



Southwest Terrazzo Association, Inc.

P.O. Box 10018
Hackberry Station
San Antonio, TX 78210

"Our Aim—
Better Terrazzo for the Southwest"



Circle 42 on Reader Inquiry Card

Corporate Art Services

Paintings
Drawings
Prints
Sculpture
Photographs
Tapestries

Traditional to Contemporary
Representational to Abstract

HARRIS GALLERY

1100 Bissonnet (Next to the Contemporary Arts Museum)
Houston, Texas 77005 (713) 522-9116 Tues. - Sat. 10-6 Sun. 1-6
Contact Annette Kaupp

Circle 45 on Reader Inquiry Card

In the News, continued.

ecture.

Fee for the workshop is \$60, which includes break refreshments, lunch (on Friday) and educational materials. For more information, contact Lynn Cooksey, Continuing Education Coordinator, School of Architecture and Division of Continuing Education, Main Building, 2500, The University of Texas at Austin, Austin 78712. Telephone: (512) 471-3123.

Industry News



Kisabeth craftsman at work.

Specializing for 22 years in custom residential furniture, **Carl Kisabeth Co., Inc.**, of Fort Worth has recently expanded its traditional handcraft "cottage industry"



International Terra Cotta, Inc.



TURTLE CREEK BUSINESS CENTER/109
1931 NO. INDUSTRIAL BLVD.
DALLAS, TEXAS 75207

690 N. ROBERTSON BLVD.
LOS ANGELES, CALIFORNIA 90069
(213) 657-3752 / (213) 657-1051

(214) 744-1269

ATLANTA DECORATIVE ART CENTER/320
351 PEACHTREE HILLS AVE., N.E.
ATLANTA, GEORGIA 30305
(404) 261-4061

Circle 44 on Reader Inquiry Card

Showroom Hours: Mon. thru Fri.: 9 AM to 5 PM, Sat.: 9 AM to 3 PM, Atlanta closed Sat.

To Subscribe

Complete and return the adjacent subscription card to join a growing readership interested in the built environment of Texas.

Texas Architect Subscription Card

Please enter the following subscription for the coming year. Six issues mailed bi-monthly.

Name _____

Mailing Address _____

Occupation _____ Firm or School _____

Method of Payment:

___ 1 year, 6 issues, \$10.00 ___ Payment Enclosed (one extra issue for saving us billing cost)
___ 2 years, 12 issues, \$18.00 ___ Bill me

Billing Address (if different than mailing address):

For More Information

We invite you to obtain more information about the products and services advertised in this issue of *Texas Architect* by utilizing the adjacent Reader Inquiry Card. To take advantage of this convenient service:

(1) Circle the number on the reader inquiry card which corresponds to the number at the bottom of the advertisement.

(2) Fill in your name and company address on the card.

(3) Detach and mail to us. Card is postage-paid and pre-addressed.

(4) We will forward a copy of the card to each advertiser whose number you have circled.

Texas Architect Reader Inquiry Service Card

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Title _____

Please Circle Number

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

S/O

Please check the appropriate box

- Owner/Partner/Principal
- Staff Architect
- Designer
- Project Manager
- Specification Writer
- Interior Designer
- Engineer
- Type _____
- Client
- Other _____

Texas Architect Reader Inquiry Service Card

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Title _____

Please Circle Number

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

S/O

Please check the appropriate box

- Owner/Partner/Principal
- Staff Architect
- Designer
- Project Manager
- Specification Writer
- Interior Designer
- Engineer
- Type _____
- Client
- Other _____



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

Texas Architect
Texas Society of Architects
2121 Austin National Bank Tower
Austin, Texas 78701



Subscription
Card



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

Texas Architect Reader Inquiry Service
Texas Society of Architects
2121 Austin National Bank Tower
Austin, Texas 78701



Reader
Inquiry Card



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 3149 AUSTIN, TEXAS

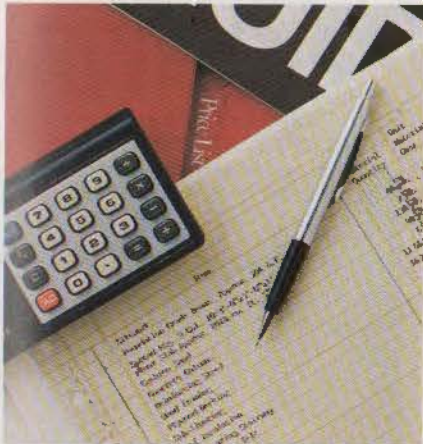
POSTAGE WILL BE PAID BY ADDRESSEE

Texas Architect Reader Inquiry Service
Texas Society of Architects
2121 Austin National Bank Tower
Austin, Texas 78701



Reader
Inquiry Card

If tight budgets are driving you up a wall, make the wall masonry.



It's true. Masonry construction is one of today's most economical building systems. You couldn't tell by looking at it.

As a matter of fact, the cost of masonry materials is about the lowest there is. Modern production methods have kept the cost low. And the quality up.

Today's masonry craftsmen are faster than ever, yet the superb quality of hand labor is still there. All at a cost that you'll find surprisingly low.

Systems such as loadbearing masonry and prefabricated masonry panels make the savings even greater. And the flexibility of design and the wide range of colors and textures are an architect's dream.

In addition to the initial cost savings, operating costs are something every building designer must think about. The energy savings alone are considerable. Maintenance and fire insurance savings add up too.

Look to masonry when you're looking for a way to beat the budget. Without sacrificing quality. For more detailed information, call the Texas Masonry Institute at (713) 629-6949. Or write P.O. Box 42097, Houston, Texas 77042.



Contributing cities include Austin, Corpus Christi, Dallas, El Paso, Fort Worth, San Antonio, Temple/Waco and Wichita Falls.

Circle 46 on Reader Inquiry Card

to include custom commercial contract furniture as well. Responding to an increasing demand just in the last year or so from architects and interior designers, the company is now striving to meet that demand in a new 40,000-square-foot facility, while determined to maintain a tradition of fine craftsmanship. Now, commercial contract work makes up about 40 percent of the company's business. Fabric is still C.O.M. (customer's own material). And delivery time, from receipt of fabric, is five to six weeks. Carl Kisabeth Co., Inc., 5320 Glenview Drive, Fort Worth 76117. Telephone:

(817) 281-7560. Texas Showrooms: 350 Decorative Center, Dallas; and Space # 109, 5120 Woodway, Houston.

American Solar King Corporation in Waco has moved into larger facilities at 7200 Imperial Drive, Waco 76710. The new 31,000-square-foot plant will give Solar King the capacity to increase its production 500 percent over current levels, according to a company spokesperson, to about 50,000 solar collectors per year.

Lifetile Corporation in San Antonio

has introduced its new "Espana" series of roof tiles, patterned after the roof styling of the Spanish missions in San Antonio. Available in natural earth colors. Lifetile Corporation, P.O. Box 21516, San Antonio 78221. Telephone: (512) 626-2771.

Howmet Aluminum's architectural products division in Terrell has introduced the new HP-1175 skylight system, designed to allow virtually no air infiltration and to provide an adequate "weeping" system for condensation. The HP-1175 also can be unit-installed to

don't draw the same line twice!

GET THE POINT? Join the PRO RIDGWAY'S team

PRO: Pin Registered Overlays provides savings in drafting time and checking time. Team Drafting utilizing the advantages of precise pin-bar registration of pre-punched drafting film will enhance your Architectural and Engineering drawings.

CALL your local Ridgway's REPROfessional for a full demonstration of the repro-drafting techniques available for all of your Contract Documents. Let the Fifth Discipline: PRO/Ridgway's complete your production team!

907-277-5508: ANCHORAGE
 404-691-9210: ATLANTA
 512-451-7318: AUSTIN
 504-344-9415: BATON ROUGE
 512-882-7471: CORPUS CHRISTI
 303-444-3390: BOULDER
 214-830-3333: DALLAS
 512-546-4543: BROWNSVILLE
 303-629-1373: DENVER
 HOUSTON
 713-782-8580
 RIDGWAY'S®
 TEXAS REPROFESSIONALS

TULSA: 918-584-2461
 McALLEN: 512-886-1525
 SHREVEPORT: 318-221-0674
 LAFAYETTE: 318-234-2306
 OKLAHOMA CITY: 405-947-6891
 JACKSON: 601-355-4751
 NEW ORLEANS: 504-522-3831
 FORT WORTH: 817-355-3241
 HONOLULU: 808-531-4456

RIDGWAY'S, INC. 5711 HILLCROFT P.O. BOX 36150 HOUSTON, TEXAS 77036 (713)782-8580



"HF-1175 Skylite" system.

facilitate assembly and erection. Howmet Aluminum Corporation, Architectural Products Division, P.O. Box 629, Terrell 75160. Telephone: (214) 563-2624.

C. E. Shepherd Co., Inc., Houston, has announced the availability of its new designer series of plastic butt hinges, which come in assorted colors and never need lubrication. The hinges are designed to endure the most corrosive and adverse conditions and to be used in lieu of metal hinges in residential, commercial, industrial and marine applications. C. E. Shepherd Co., Inc., 7206 Dallas, Houston 77011.

Mark Weidner, president of the Industry Foundation of the American Society of Interior Designers, Texas Gulf Coast Chapter, has announced the appointment of **John Halderman** as chairman of the Second Annual Houston Designer's Market. More than 2,000 designers, specifiers and architects will be invited to attend the Nov. 8 market.



PLASTECO skylights

Standard, Custom and Structural
Many models shipped pre-glazed



STANDARD DOMES TO 8' x 8'



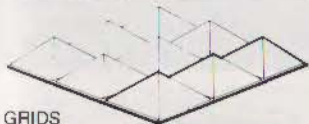
STRUCTURAL PYRAMIDS TO 20' x 20'



STRUCTURAL VAULTS TO 24' SPAN



TANDEMS



GRIDS



LEAN-TO's



STRUCTURAL DOMES TO 24' DIA.

Ask for Catalog, or see Sweet's 7.8.

To predict the energy performance
of a specific skylight plan, request a
SUN Computer Analysis input form.

Write Plasteco, Inc., P.O. Box 24158,
Houston, Texas 77029. (713) 674-7686



PLASTECO, INC.

DISTRIBUTORS AND FABRICATORS SINCE 1947

Circle 48 on Reader Inquiry Card

Craftsmanship: a Cold Can of Coors



Humor by Braden

I once owned a building that had medical tenants and therefore have had landlord experience with a broad variety of those who earn their daily bread probing the mental state of others—all of which has led me to the conclusion that, more than any other profession, psychiatry typifies the age-old expression: "It takes one to know one." However, there are some things involved in the practice of psychiatry, and its attendant mental arts, which do intrigue me. One of these is the Rorschach Test, a process wherein the patient is asked to interpret ten standard ink blots.

There is a similar thing called "word association," which anybody can do by simply closing their eyes and conjuring up a mental picture of any word or phrase which comes to mind. For example: a recent independent survey conducted among 50 laid-off Chrysler employees indicated when the word "craftsmanship" was mentioned, 41 of them immediately saw a Datsun 510.

When a similar test was tried on a group of architects, which included me, the results were startlingly different. In our group of 50 architects, 25 immediately saw the lovingly polished, hand-crafted, mortise and tenon joinery executed in the redwood of a Greene Brothers house. Across the brain screen of 24 others flashed the picture of the beautiful architectural sculpture of the Farnsworth House standing in the middle of its flood plain site near Plano, Illinois.

For the uninformed, the Farnsworth House was designed in the late forties by the late, great architect Mies van der Rohe. It represented perhaps the epitome of the machine-like architectural technological thought in those times of sumptuous energy resources. It stood on white steel stilts in the expanse of a dry river bed—a glass box surrounding a rigid, welded steel frame, dutifully reported by

Architectural Forum to have been magnetized! It has never been explained just why the steel frame was magnetized (or if indeed it really was), but the *Forum* went into editorial ecstasy over the fact that when struck with a mallet the columns of the frame gave off tones which could only be compared with the clear crisp sounds of peeling chapel bells.

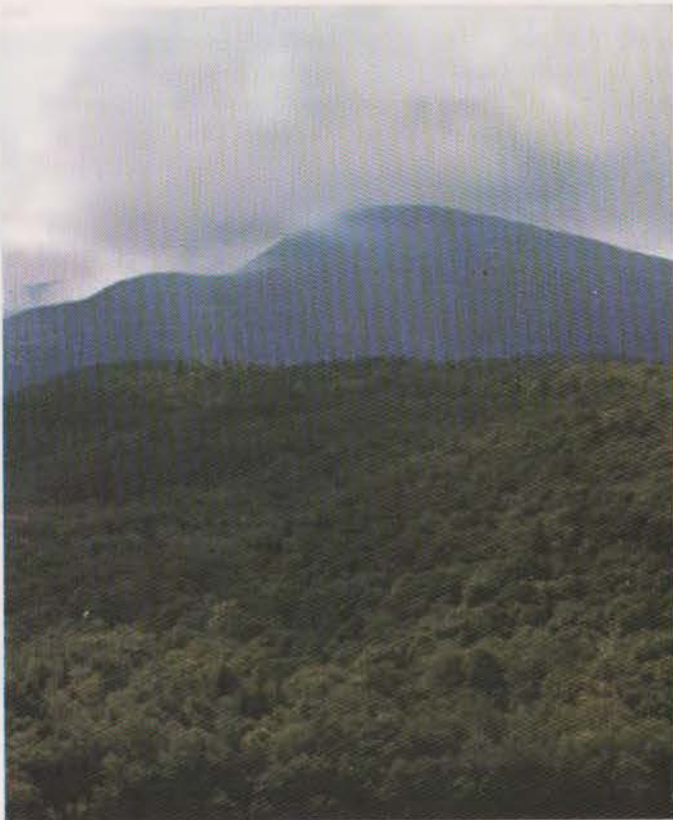
One architectural wag was so enraptured by the whole deal that he immediately tossed off a parody of Edgar Allen Poe's "The Raven" and sent it to the editors:

Architects who questioned said:
"Build a house upon a river bed?"
"Few of us are sympathetic;
What if the structure is magnetic!"
Yet there it stands, all bright and
gleaming.
Listen; hear the columns ringing,
"Bong Bong Bong"
Quothe der Rohe:
"Less is Mo"

Unfortunately, the lone exception in this group of architectural mental voyeurs was me. "Craftsmanship," they said, and there projected on my cranial lobes stood a cold can of Coors! You see, our firm once had a client for whom we built a magnificent refrigerated Coors distribution facility. It was in the construction of that facility that I came to recognize "Craftsmanship" for what it really is. Craftsmanship is a cold can of Coors.

As a result of poor craftsmanship, our Coors facility developed a roof leak which allowed water to seep through some devious unknown channel out to the edge and across the warm-tone stucco facade. The resulting stain was one of those things you either have to paint out or grow a bush over. As a group, architects are more appreciative of craftsmanship than most, and completely frustrated in our ability to achieve it in our buildings. We love to take great pains—and

Peak performance.



At the very top of Mount Washington, the State of New Hampshire is building a new meteorological observatory and visitors center.

The first problem is wind. The highest wind ever recorded, was recorded here (231 m.p.h., in 1934). The wind exceeds hurricane force 104 days *each* year.

The second problem is the cold. The temperature has gone as low as -47°F.

The third problem is snow. In the winter of 1968-69, they had 566 inches of it.

The fourth problem is visibility. 60% of the time, the facility is covered by clouds.

Architects Dudley, Walsh and Moyer of Concord, N.H., general contractor Harvey Construction

Company of Manchester, N.H., and applicator Associated Concrete Coatings, also of Manchester had their jobs cut out for them. About the only problem they didn't have is deciding what product to use to coat and protect the \$3.4 million structure, "...from the worst weather in the world."

So just before the furious winds of late Fall began anew, the concrete building was covered, top to bottom, with a trowel coat of Thoroseal Plaster Mix (mixed with Acryl 60 for enhanced bonding and curing).

Thoroseal Plaster Mix is 100% waterproof, harder and more wear resistant than concrete alone, and bonds so tenaciously that it actually becomes a part of the wall. The toughest part.

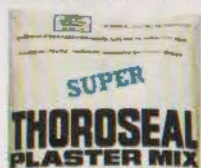
That's why it's on Frank Lloyd Wright's "Fallingwater," which has a waterfall going right through it. And it's also why it's on the concrete river beds at Busch Gardens.

We're Thoro System Products, and when it comes to protecting your concrete and masonry, even from the worst weathering conditions in the world, we do it. Better and more often than anybody else. And have for more than 65 years.

THE HIGHEST WIND EVER OBSERVED BY MAN WAS RECORDED HERE

FROM 1932 TO 1937 THE MT. WASHINGTON OBSERVATORY WAS OPERATED IN THE SUMMIT STAGE BEFORE THEN OCCURRING THIS SITE IN A GREAT STORM OF APRIL 12, 1934 THE CREW'S INSTRUMENTS MEASURED A WIND VELOCITY OF

231 MILES PER HOUR



THORO SYSTEM PRODUCTS®

Standard Dry Wall Products
7800 N.W. 38th Street, Miami, Florida 33166

*Thoroseal and Acryl 60 are registered Trademarks of Standard Dry Wall Products

© 1980. Standard Dry Wall Products



Texas Dealers

Best Service Building Materials

P.O. Box 17821
San Antonio, Texas 78217
512/349-4301

Blue Diamond Company

P.O. Box 15787
Dallas, Texas 75215
214/428-1331

Builders & Contractors Materials Co.

P.O. Box 26190
Dallas, Texas 75226
214/742-6902

Builders Equipment & Tool Co.

P.O. Box 8508
Houston, Texas 77009
713/869-3491

Featherlite Corporation

P.O. Box 355
Abilene, Texas 79604
915/673-4201

Featherlite Corporation

P.O. Box 425
Austin, Texas 78664
512/255-2573

Featherlite Corporation

P.O. Box 357
Beaumont, Texas 77651
713/727-2334

Featherlite Corporation

P.O. Box 9977
El Paso, Texas 79990
915/859-9171

Featherlite Corporation

P.O. Box 489
Lubbock, Texas 79408
806/763-8202

Featherlite Corporation

P.O. Box 991
Midland, Texas 79702
915/684-8041

Featherlite Corporation

P.O. Box 67
San Antonio, Texas 78109
512/658-4631

Wylie climbs the walls

The company that carpets the floors is now climbing the walls. Hush-Craft textures in wool, acrylic and nylon combinations are the latest addition to a contract wallcovering selection that also includes sisals and suede cloths in a wide range of patterns and colors. All meet Class A codes. Visit our Dallas showroom, or make a toll-free call to 800-442-7550.



Jim Wylie and company
JW
3234 Dallas Trade Mart
Dallas, Texas 75207



BIG MAN IN STRUCTURAL STEEL

They rise into the Dallas skies like silver and white castles . . .

Paul Mitchell, Vice President-Manager of Sales for Moshier Steel in Dallas, has been helping turn dreams into reality for the 33 years he's been with Moshier.

The 50-story Theme Tower and the 1000-room Hyatt Regency are the keystones of REUNION, a project of Woodbine Development Company. Steel framework for these striking buildings, 7200 tons in all, came from Moshier.

Paul hasn't just **seen** the Dallas skyline change, he's played a big role in changing it. REUNION joins First International Building, The World Trade Center, the Apparel Mart, 2001 Bryan Tower, the Convention Center and Southland Center as recent additions to burgeoning Dallas. Moshier Steel's name and reputation are built into every one of them and Paul Mitchell's the man who led the Moshier sales team.

Making friends out of customers is a familiar story to Paul and to Moshier. From design concepts to on-time delivery at the site, Moshier's reputation for quality, reliability and service is unsurpassed.

Performance — the reason Moshier is the big name in structural steel.



Home Office and Plant
P.O. Box 1579, Houston 77001
(713) 861-8181
Plants in Dallas, San Antonio



A Trinity Industries Company

give them to somebody else!

The client was righteously indignant at the thought of having to go through life with stained stucco because of this craftsmanship failure. And so it was that we came to reason together—our client and I—and to explore where the construction industry had gone wrong. I explained that, in my view, his business was such that he received each day from the bowels of refrigerated railroad cars thousands of absolutely identical chilled vessels of the perfect product of the brewer's art—each housed in an aluminum can so perfectly engineered that its walls could be no thinner and still support its contents. The product itself was an example of the highest form of craftsmanship, executed under laboratory conditions. All my client friend had to do with this perfect product was to put it on a cold truck and distribute it for cold cash.

On the other hand, we architects are people in the business of describing our dreams as best we can, and turning them over to the lowest bidder who hires some guys off the street to put them into reality. I know of no other industry which has its products built by a bunch of complete strangers standing around in the mud beating boards together with clubs.

Our client and I cried about this for a while, sipped a few cold ones and planted an ivy in front of the stain. Since that time I have come to understand that craftsmanship is still with us in our technological society, but only to the extent that it has become art. There is no reason for us to expect that craftsmanship will ever permeate our mass-produced, technological society to the degree that we would like. But, there is an abounding need to understand that there is a use for craftsmanship in activities other than the arts. We could use a little craftsmanship in our politics, our statesmanship, our thinking, and our own work, to name a few.

Perhaps it is timely for America to reflect on Gardner's Official Rule:

"The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water!"

Dave Braden is a partner in the Dallas firm Dahl/Braden/Chapman, Inc.

Letters

Editor: I sincerely believe that Jim Coote's article "Eight for the Eighties" (July/August) is the best written piece ever contributed to the magazine. Last summer I stood on the corner of Amalfi and Channel in Pacific Palisades and merely pondered the Burns House on the hill above. But Coote walked us all through it in a way that was completely captivating and meaningful. Architects and laymen alike I'm sure enjoyed what he had to say, and could read it without difficulty. He has the gift of an intellectual style which is not at all stuffy. For instance, no one has ever put Graves or the Gehry house in such correct perspective for me until now. And his selections (although I'm sure with great difficulty) were very well made. Bravo!

R. Lawrence Good, AIA
Parkey & Partners Architects
Dallas

Editor: Thank you for sending me the fine July/August issue of *Texas Architect*. It is as good a coverage of an awards competition as I've seen. Of course, the entire program was conducted in that manner. It was indeed a pleasure participating in the event.

W. C. Muchow, FAIA
WC Muchow and Partners
Denver, Colo.

Editor: Congratulations to you and your staff for an excellent publication.

Roland Gommel Roessner, FAIA
Austin

Editor: In reviewing the minutes of a recent TSA Publications Committee meeting, I read that you are concerned about the lack of letters-to-the-editor feedback from the readership. I thought you would like to know that I particularly enjoy "Humor by Braden."

Braden
Dahl, Braden, Chapman, Inc.
Dallas

STEWART OFFICE SUPPLY CO.

TEXAS' LEADING CONTRACT DEALER
FOR COMMERCIAL INTERIORS

Offering these full services
to the Professional:

Procurement & Expediting

Showroom Facilities

Delivery/Installation

Continuing Service

Product Research

Survey Analysis

Warehousing

Make-Ready

Budgeting

Receiving

Authorized
dealer for the
following
manufacturers:

GF
Herman Miller
Knoll
Lehigh-Leopold
Kimball
Kittinger
Gunlocke
Jens Risom

plus many others

Showrooms: 401 So. Lamar • Dallas


SINCE 1912
Stewart's

400 So. Austin • Dallas 75202
214/747-8581

SOME PHOTOGRAPHY HAS TO BE AHEAD OF ITS TIME.

The photo at the top (1.) is an example. It was made 12 months before construction began on the building in the photo at the bottom (2.).

Both photographs were taken to create interest among potential tenants. Both had the same effect: people driving up and down the Loop looking for the future U. S. Home Building.

The effects were the same because, in each case, we set out to capture the feeling of the architecture and setting, not simply to document the building in precise detail. It's a technique we learned in building architectural models, and it seemed to us that it should work in photography, too.

And it has. So much so that most of our clients for architectural models are becoming clients for architectural photography.

We don't think this is just because our rates are competitive and our turnaround time fast. In fact, our clients keep saying, in no uncertain terms, that it's because we understand architecture. Since we're architects, we'll accept that.

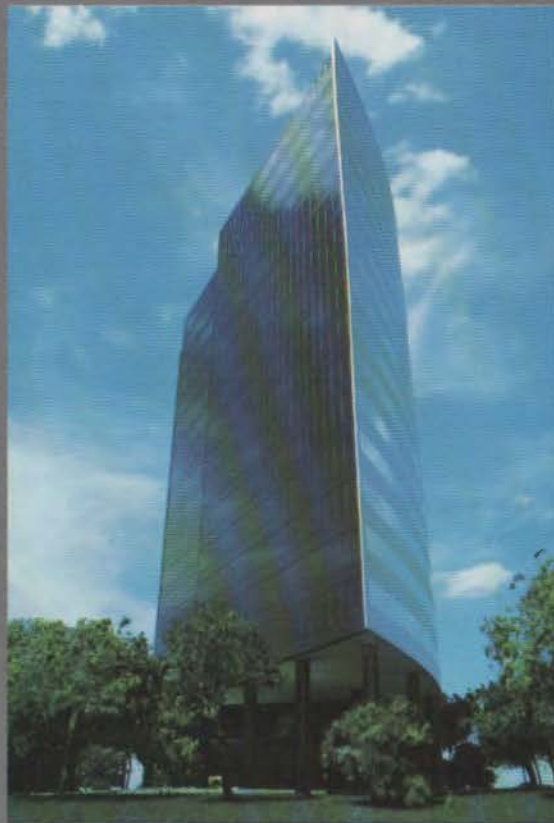
If you'd like to know more about our services, call us at 627-2233. We'd like to tell you more.

- 1. Photograph of scale model
- 1a. Photograph in leasing brochure application
- 2. Photograph of actual building
- 2a. Photograph in magazine ad application

Kinetic Systems Inc.

A diversified firm of architects, designers, and craftsmen.

1177 West Loop South
Suite 1450
Houston, Texas 77027
713/627-2233



1.



1a.



2.



2a.

Energy-saving PPG glass should go on your building before your building goes on paper.

Examine all your options. Make sure you specify cladding materials as engineered parts of a total energy system. Many allow you to build in significant energy savings while creating perfectly stunning esthetics.

Some of the most effective cladding materials are the imaginative glasses created by PPG. Especially the Solarban® family of glass products, with its wide range of colors and reflectivity. Any of the Solarban group is beautifully reflective, attracting tenants while delivering significant operating economies.

And the range of appearances is limitless. If you find that your building will work better wearing an all-glass skin, how could we object? But we can also show you how to effectively combine glass with granite, or with aluminum, or with brick, to create a dramatic, energy-sensitive outer skin.

For instance, here's the charge of a Boston developer to his team of architects: Design an energy-

sensitive building that appeals to professional tenants. And design that building in a manner that does not intrude on the historic landmarks so dear to the community.

The result? A fitting, elegant and

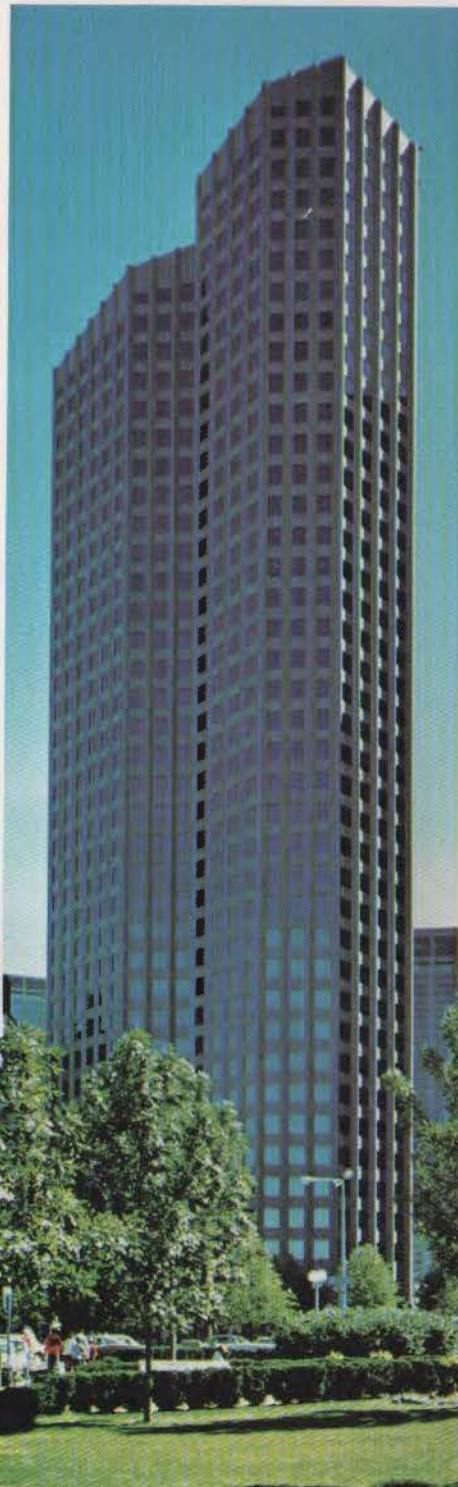
energy-saving statement known as Sixty State Street. By using large-sized PPG Solarban 575-20 glass, a specially designed lighting system and an HVAC system geared to complement both glass and lighting, Cabot, Cabot & Forbes realized an energy savings of approximately 40% per square foot over their neighboring properties. And the combination of glass with granite projected a look of quality, a look that particularly suited the adjoining landscape. Plus, the unusually strict Boston building codes were strictly satisfied.

That's just one shining example. To learn more, send for our newest Architectural Glass Products book. Then get together with your building team and talk glass before you start all those papers. PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future



Circle 54 on Reader Inquiry Card



Sixty State Street, Boston.
Architect: Skidmore,
Owings & Merrill, Chicago.
Owner-Developer: Cabot,
Cabot & Forbes Company,
Boston.

HURRICANE



Hurricane Strikes Galveston... But Old Red Takes The Blow.

1900 It wasn't called Old Red back then. In 1891 it opened as the University of Texas Medical School. Being the first medical school in Texas, this Romanesque structure was a source of great pride for the people of Galveston.

In September Old Red was the center of activity as medical students returned for a new term. Life in Galveston went on as usual; the only real talk around town was the rumor of a newborn cyclone near the West Indies. But storms down there usually veered northwest, up the Atlantic Coast. As the people of Galveston would soon

find out, hurricanes are not so predictable.

On the 6th, word reached Galveston . . . the storm, now a full-fledged hurricane, was in the Gulf. Whether or not it would strike Galveston, no one knew for certain.

At noon on the 8th, a new wind started blowing from the south and the Gulf began to churn. Residents along the beach became frightened and fled inland. Classes at Old Red were canceled as Galveston prepared for the worst.

Within hours, the streets were silent. The only things heard by those barricaded in their homes were the ever-present wind and driving rain. . . steadily growing. Old Red, deserted now, stood alone to face the storm; only the rabbits in the small breeding pen and Dash, the faculty dog, remained.

By nightfall the full force of the storm hit, with winds estimated at 125 miles per

hour. Homes splintered like match boxes. The raging Gulf drove through the streets, washing away everything unable to withstand its fury.

Then, suddenly at midnight, the winds began to die. By 1 a.m. the waters began to recede. . . it was over. An estimated 6,000 people had perished. Galveston lay in ruin, half the city destroyed. Human bodies, dead animals, furniture and houses were scattered throughout the city. Yet in the middle of it all. . . stood Old Red. Though battered and torn, its masonry walls took the blow struck by one of the worst natural disasters of the century. In the days that followed, the faculty and students treated the injured. Two months later, Old Red reopened for classes.

Today, Galveston is once again a thriving resort community. And Old Red, restored to its original grandeur, still stands. . . a Galveston landmark built of masonry.



To find out all the facts about masonry's durability, its sound and fire control capabilities and its lasting beauty, call or write the Masonry Institute of Houston-Galveston.

A landmark should be built to withstand more than time.



**Masonry Institute
Houston-Galveston**

Halbouty Center, 5100 Westheimer
Houston, Texas 77056
(713) 629-6024

Photos Courtesy Rosenberg Library & UTMB