More choices. Greater possibilities.

Steelcase offers you the widest choice of programs and services for effective office environments, as well as both Steelcase and Stow & Davis furniture. We can help you find the right solution for each of your needs.

Steelcase/Stow & Davis INNOVA Building 20 Greenway Plaza Suite 506 Houston, TX 77046 713/840-0377

Circle 102 on Reader Inquiry Card

Steelcase The Office Environment Company
TEXAS SOCIETY OF ARCHITECTS
49th ANNUAL MEETING and
PRODUCTS EXHIBITION

TEXAS: State of the Art

A PARTIAL LISTING OF EXHIBITORS:

FREE ADMISSION
The exhibit hall is open to all area building and
design professionals and their clients . . . architects,
employees of architectural firms, engineers, contract-
tors, interior designers, builders, landscape architects,
and developers. Refreshments will be available Friday evening
for the Opening Night Party, starting at 3:30 p.m.

VISIT OVER 200 EXHIBITING FIRMS
Firms from throughout Texas and
the United States will be on hand to
display their newest product innovations
and introductions in all key fields
—interiors, exteriors, lighting, office
systems, energy systems, practice systems,
CAD/D, CAM, and many others. TSA
member architects can sign up for hundreds
of dollars in free prizes simply by visiting
exhibitors' booths.

PROFESSIONAL PROGRAMS/SEMINARS
On Saturday and Sunday, Nov. 18 and 19,
attendees may choose from a broad variety of
professional programs throughout both days.
Topics range from design-oriented to marketing
based, and promise to be both informative and
interesting.

FRIDAY, NOVEMBER 18
Opening Night Party 3:30 p.m.—7:30 p.m.
SATURDAY, NOVEMBER 19
Seminars 9:30 a.m.—11:45 a.m.
Exhibits Open 11:00 a.m.—4:00 p.m.
Exhibit Hall Luncheon 12:30 p.m.—2:30 p.m.
Convocation/Reception for
newly licensed architects 4:00 p.m.—6:00 p.m.

Come to
San Antonio
November 18—20, 1988

PITTSBURGH CORNING CORPORATION
PROSOCO, INC.
RALPH WILSON PLASTICS COMPANY
RIDGEWAY'S, INC.
S. A. MAXWELL CO.
SCHIRMER ENGINEERING CORPORATION
SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL
SOUTHWEST BUILDING MATERIALS, INC.
SOUTHWEST TERRAZZO ASSOCIATION, INC.
SOUTHWESTERN BELL TELEPHONE
STERLING ENGINEERED PRODUCTS, INC.
STUCCO STONE CORPORATION
TECTUM, INC.
TEXAS FIRESTOP/TEXAS PROTECTIVE
COATINGS
TEXAS GAS UTILITIES
TEXAS GRANITE CORPORATION
TEXAS INDUSTRIES, INC.
TEXAS URETHANES, INC.
THE ROOFTILE & SLATE COMPANY
THORO SYSTEM PRODUCTS
THYCURLB
U.S. INTERC
WESCO DISTRIBUTION, INC.
WRIGHT BUILDING PRODUCTS/READ
ARCHITECTURAL PRODUCTS

For more information on attending or exhibiting,
please call
512/478-7386 for details.
A TEAM PLAYER
IN THE TRUE SENSE

"We were encouraged to find that CCM understands and appreciates the design process. CCM makes every effort to enhance the aesthetics of the project while creatively reducing the cost of the components and their delivery system."

— Richard E. Morgan, A.I.A.,
J.P.J. Architects, Inc.,
Dallas, Texas

Client Construction Management's staff of building professionals are aware of and accustomed to the critical need for compliance to the architect's design and their desire for quality control. That's why we developed our value based building system, which is revolutionizing the construction industry. CCM's unique system is centered around three primary areas: Value Engineering, Value Bidding and Value Management. Our value system is a careful balance between cost, function and quality. When CCM assumes total management and financial responsibility for a project, you can be assured your design will be built according to your specifications in the most cost effective manner possible.

To find out more about how our value system can address your specific needs, please call us.
TRADE MArTS AND OFFICES OF THE FUTURE

ABOUT THIS ISSUE

IN THE NEWS

A RIUDAT team recommends ways to strengthen the communities of the Rio Grande Valley; Houston's 3/DI reorganizes to balance market and company demands; Galveston's troubled trolleys run.

PRACTICE

Small firms now have more choices for retirement plans. By Bob Frater, a Houston-based financial planner

THE CRYSTAL PALACE DISSIMULATED

Richard Ingersoll examines the architecture of design centers in Houston and Dallas as well as their role in today's economy.

FOUR SHOWROOMS

Steelcase/Stow & Davis, Houston, by Janita Lo & Associates 30
Sunar Hauserman, Houston, by Frank Gehry & Associates 32
Haworth, Houston, by Gensler and Associates/Architects 34
AT&T, Dallas, by RTKL Associates Inc. 36

UFFIZI TO ARCHIGRAM

Can plugging in the virtual office save the American economy? Researchers say that designers have to help bolster white-collar productivity—or else. By Joel Warren Barna

WHITTINGTON, MEIS & NARRO

James Mayeux, Architect, uses slivers and swatches of light to warp the space in a small advertising firm's offices. By Joel Warren Barna

BOOKS

A monograph on the work of Kohn Pedersen Fox, reviewed by contributing editor Gerald Moorhead

MUSINGS/DAVID BRADEN

ON THE COVER: The AT&T Customer Technology Center, Dallas, designed by RTKL Associates Inc., Dallas. Photograph by Blackmon-Winters.

COMING UP: The TSA Student Design Competition and notes on architectural education, plus a special advertising section on floor coverings.
Great minds have always had the unusual ability to stand apart from the crowd. And each other. Now they have the perfect means to do so.

Introducing PLACES™ From Haworth.

PLACES is everything from fanlights to fabrics. Wood to glass. And anything else you could ever need to design offices that are intriguing, inviting and individual. Like you.

For more information call 1-800-344-2600.

They're built.

Circle 5 on Reader Inquiry Card
Choose the pay phone that costs less than the pencil you’ll use to draw it.

It’s from Southwestern Bell Telephone. And it’s the best way to add the convenience of pay phones to your designs without adding additional costs.

That’s because we install our pay phones free. Repair them free. And maintain them free.

What’s more, no one knows more about pay phones than we do. And we’ll work closely with you to help choose locations and styles that are right for your building.

All of which makes our pay phones the best pay phones to draw into your blueprints right from the start.

So pick up your pencil and write down the number of your Pay Phone Consultants. It’s 1-800-255-SWBT, extension 170. When it comes to pay phones, it’s the best call you can make.

The one to call on:

Southwestern Bell Telephone

Circle 6 on Reader Inquiry Card
The office-furnishings industry is one of America's economic heavyweights, contributing an estimated $20 billion annually to the gross national product.

Office-furnishings companies, through their research programs and contract-design showrooms, are also important guides to the future of interior architecture, office planning, facilities management, and furniture design.

In this issue, writer Richard Ingersoll presents his critical (some would say bluntly critical) survey of the state's major design facilities, from the Dallas Market Center to Houston's Innova. Ingersoll sees two strategies employed in the design of these centers. The first is purely architectural, he says: it results in buildings, like Innova and the original Dallas Decorative Center, in which harmony reigns among program, planning, cultural context, and structural expression. The second strategy is scenographic, according to Ingersoll, emphasizing strong images for buildings, even when those images create a kind of dissonance with the needs of users or owners. Architect Martin Growald's Infomart in Dallas is at the center of Ingersoll's criticism, just as, in our September/October 1986 issue, it was at the center of praise by writer Clovis Heimsath, FAIA, and others. I think that Ingersoll's appraisal may not be the final word on this controversial, complexly engaging structure.

In this issue we also present a portfolio of design showrooms in Dallas and Houston, all of which use architectural means to highlight, if not apotheosize, the furnishings and business equipment on display. RTKL's AT&T Customer Technology Center, featured on our cover, is an example: it treats computers and communications equipment as objects of an adventurous quest—it's kind of an architectural "Indiana Jones and the Temple of Telephones," with AT&T customers in the role of hero-for-a-day. Role playing is also an important part of the strategies employed in the relaxed village of Frank Gehry's Sunar Hauserman showroom, Janita Lo's bucolic Steelcase/Stow & Davis, and Gensler and Associates Architects' diamond-mine entryway for Haworth. At the scale of the showroom, such diverting image-mongering seems entirely appropriate.

How such a playful approach affects architects, clients, and, ultimately, office workers, however, may be another matter. It may, in fact, be literally a diversion from serious business. Researchers are beginning to look with increasing dismay at the productivity of the office-work industries that all the designers and design showrooms serve. As the feature story "Palazzo To Plug-In" shows, the future may require a radical overhaul of office work in America, with far-reaching consequences for architecture, design, contract furnishings, real estate, even the home life of American workers. If not, researchers like Duncan Sutherland and Steven Parshall of CRSS argue, American office workers may have to get used to playing a new role in the global economy—the role of has-been. There is serious business going on behind the scenography, and Texas architects need to pay careful attention to the changes now underway.

—Joel Warren Barna
R/UDAT Completes Blueprint for Valley Corridor's Future

Five years of planning and organizing by architects and public officials in the Lower Rio Grande Valley culminated on Apr. 22-25 with a visit by a national-AIA Regional Urban Design Assistance Team (R/UDAT).

The team produced a 52-page report, containing recommendations for strengthening the State Highway 83 corridor both in aesthetic and economic terms, which was presented to interested citizens on the last day of the visit. Local organizers hope the R/UDAT report will guide further development along the freeway that connects 30 cities across Hidalgo and Cameron counties, including McAllen, Harlingen, and Brownsville.

The AIA-sponsored R/UDAT program offers multidisciplinary expert assistance to communities that recognize local urban-design problems. R/UDAT members included architects Dennis Ryan, Seattle; Tony Enriquez, Oakland; Lajos Hedder, Cambridge, Mass.; and Corky Poster, Tucson; border-relations expert Larry Herzog, San Diego; landscape architect Richard K. Untermann, Seattle; and city official John Woodland, San Diego. A five-student team from Texas Tech University provided graphic and logistical support. In addition, a steering committee composed of local officials and an AIA chapter advisory committee headed by McAllen architect Tom Ashley III organized the four-day work session and carried out background work.

In the R/UDAT report, the team first outlined problems: (1) destruction of the Valley's regional image—its friendliness, connections to Mexico, semitropical climate, and agricultural heritage; (2) destruction of visual quality through "clutter," such as trailer parks, billboards, and junkyards; (3) loss of town identity, history, and culture by homogenization "into neutral mediocrity"; and (4) draining of local economic vitality, as shown in the decay of downtowns and growth of economies tied to the expressway.

Then, with accompanying graphic examples, the team recommended a long-term effort to project a clearer image of the pattern of the region, consolidate development along access roads, provide direct access to traditional town centers, and revitalize these centers to retain "the distinct identity of each city."

The 70-mile-long corridor should be formally defined, the report says, as a "Corridor Special Planning Area," with attention paid to the following qualities:

- **Corridor as the common ground.** Highway 83 should become the "place for coordination for the common good" of the traditionally maverick cities.
- **Corridor as the common thread.** The freeway's current role as linear inter-city connector should be emphasized, "relating urbanization to the corridors, where the accessibility is greatest, [so that] the land behind the corridors can be maintained for agricultural uses."
- **Corridor as the mirror of community values.** The freeway should not be expressed as a "show piece," but as the "family room [to] be comfortable about."

Defining the Special Planning Area, the report says, would allow for review of all development to ensure that common objectives are met for land use, circulation, urban design, and landscaping within the region.

Beyond the report's specific goals, the team says, greater regional cooperation is needed to resolve other issues that are hampered by competition within the corridor, including airport and international-bridge locations, water rights, land-use control, tourism, billboard control, municipal annexation of corridor land, and the growth of impoverished colonias.

With the report in, says R/UDAT Coordinator Ashley, the focus now shifts to education and implementation. He is part of a task force that will make 75 to 100 presentations to local groups this summer. This fall, he says, the task force hopes to hold an open design competition to stimulate further interest statewide.

As with any large-scale planning effort, results will be hard to measure, R/UDAT Chairman Ryan says in the report. "One always hopes a R/UDAT project like this will take off, that we will reach a number of audiences and manage to pass the baton from our team's brief stay to members of the community who can make a difference. Not everything we say, propose, recommend, or suggest needs to be dealt with. Some of it is clearly underdeveloped; we didn't have the time or information to go further.

Some of it may be plain wrong—we make mistakes just like anyone else. But we sense the readiness of the Lower Rio Grande Valley community to take some bold steps about shaping their future."

-Ray Don Tilley

---

Edited by Ray Don Tilley
3D/I Restructures to Balance Market, Company Demands

Responding to market and internal forces, 3D/International (3D/I), Houston, will soon complete a two-year transformation of its architecture, engineering, and project-management operations into a holding company with up to a dozen subsidiaries.

Since July 1986, 3D/I’s majority owners, J. Victor Neuhau s III, chairman, and Charles B. Thomsen, president, have called on senior leaders within 3D/I to create subsidiaries from the company’s several service divisions. They have also sought specialists in other locations or with desirable specialties to create further subsidiaries as a way of expanding the company’s markets and rejuvenating its profits.

Unraveling the Corporate Giant

"It’s all really a very simple concept," says Thomsen. The subsidiaries are smaller entities that can pursue more specialized projects but that also can team up with other subsidiaries for larger and more complex jobs.

Having a large, centralized corporate structure was profitable in the 1970s, especially for doing business abroad, says Neuhau s. But now specialization and personal contact allow better response to clients’ desires. “Ten to 15 years ago we could work without local partners, as we did in the Middle East,” says Neuhau s, "but there has been a growth of professional and technical ability around the world. In many areas, there’s a new generation of architects and engineers — often educated in the West.” As a result, foreign clients have shifted from using large American firms to using local firms that allow more personal contact, often with comparable technical expertise.

In response, 3D/I is coupling with its experience and resources the marketing draw of a familiar, respected local contact in each prospective geographic niche.

One example is 3D/I Hong Kong, owned equally by 3D/I and the Australian partnership Liang Peddle Thorp, which has a long history in Hong Kong. John Dieeken, who owns 10 percent of the subsidiary’s stock, heads the office. In the past, 3D/I Hong Kong has served American clients in the region, including IBM and American Express, Neuhau s says, and now hopes to gain more local clients.

Further associations modeled on 3D/I Hong Kong are planned, says Neuhaus, with the next such venture likely to be formed in London.

Investing in a Few Names

“We’ve found today that you must be very flexible,” says Neuhaus. “We’re investing in [our employees’] names for personal recognition that’s deserved, and to get clients knowing they’re dealing with the ones responsible for making decisions.”

G. Norman Hoover, FAIA, and James E. Furr, FAIA, have two of those names. In February, 3D/I announced the formation of Hoover & Furr, which essentially replaces the former architecture, interior-architecture, and graphics groups within 3D/I.

Initially, 3D/I still owns nearly all of Hoover & Furr and therefore receives nearly all of the firm’s profits. “But we may not want to break away so far at first, anyway,” Furr says, because 3D/I’s presence provides the security that would be absent if the new firm were going it alone. Hoover & Furr is more marketable, too, Furr says, because clients like having “Hoover” and “Furr” as actual persons with ultimate responsibility.

As president of the new subsidiary, Furr says, he will act in much the same capacity as he did as the head of 3D/I’s design group. The group was one of several “profit centers” within the company, which were treated as individual entities and were expected to produce profits on their own within the company’s overall performance. Neuhaus and Thomsen will be available for consultation and marketing help, Furr says, but otherwise he and Hoover will manage the firm.

Moving in New Directions

Attempting to get a foothold in an emerging market, 3D/I has created Public/Private Development Advisors (PDA) to consult on privatization opportunities, such as the planned Law Courts Administration Building in Washington, D.C.

“There is a trend toward more and more public/private ventures now,” says Neuhaus, “and there are many different ways they could work.” On the Law Courts proposal, for example, PDA and federal officials have set up bid-package parameters for a building to house 800 federal-court employees. The government will provide the land and a break-even 30-year lease to a developer who will finance, build, and maintain the building, leasing additional space for profit. After 30 years, the developer will give the building to the government.

The Future of 3D/I

Once 3D/I finishes dismantling into subsidiaries, says Neuhaus, the firm should continue to expand, forming new subsidiaries in particular areas, such as London, or in new specialties, such as toxic-waste handling. Some subsidiaries, through stock options offered to principals such as Hoover and Furr, may eventually break all ties to 3D/I. The diversification may also allow gradual transition.
Waterproof. Restore. Decorate...

with Thoro’s “System” of compatible products formulated especially for concrete and masonry. Suitable applications include interior and exterior use on above and below-grade surfaces.

Thoro System Products has offered successful solutions and long-lasting results for over 75 years and continues to develop new products to meet the needs of today’s industry. And all Thoro products carry a full material and labor warranty.

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

A tradition of excellence, building on tomorrow’s opportunities.
of ownership, Furr says, from majority owners Neuhaus, 62, and Thomsen, 56, to the heads of subsidiaries.

Will 3D/I be a stronger company? "It's too early to tell on profitability," says Neuhaus. "We've had a general increase in profits over the last five or six years, and we hope that continues."

One sure benefit should be better worker retention. "We've lost some design reputation and skill recently," he says. "We've lost a lot of good designers." From a peak of 700 employees in 1977, 3D/I's ranks dwindled to 250 in 1982, but have increased now to 400.

Individual credit, Furr says, is crucial to retaining senior-level employees, many of whom have left 3D/I in the past few years to seek more creative freedom and recognition. Some of these employees landed with other firms; others opened new firms. The list includes Frank Douglas, FAIA, former head of the graphics group, and Steve Harding, who formed Douglas & Harding Inc., Houston; Gary Whitney, former design leader of the interior-architecture group, who formed The Whitney Group, Inc., Houston; and William Kuykendall, former head of the engineering group, who joined the Texas Medical Center, Houston. Most recently, James Baker joined RTKL Associates, Inc., Dallas, leaving as head of the now-defunct 3D/I Dallas, which was to have become a subsidiary until Baker left.

If Neuhaus's and Thomsen's expectations are fulfilled, the restructuring will allow 3D/I to retain most of its corporate structure, to present a more marketable package to clients, and to allow employees greater independence.

Still, in a sense, 3D/I has come full circle. Diversified Design Disciplines (3D) was formed in 1972 as the parent company of Neuhaus + Taylor; Brooks Barr Graeber and White; Chenault and Brady; and Ellisor Engineers. In 1977, all subsidiaries and operational groups of 3D were combined to form 3D International, Inc. Now, 11 years later, the diversity is being redefined—in new subsidiaries with new names and specialties. And 3D/I continues to evolve as a distinct practical study in the business of architecture.

— RDT

Prescription for Tough Times: Liability Advice from a Specialist

Professional liability insurance is a major cost of doing business; second only to personnel expense for most Architects.

In difficult economic times, your firm's professional liability insurance needs should be attended to by a specialist, informed about the possibilities for the most effective treatment possible.

Assurance Services, Inc. has specialized in professional liability insurance for the past eleven years, and continually monitors developments in the dynamic professional liability market. We have access to major professional liability underwriters, and since 1981 have administered the TSA Endorsed Professional Liability Program, now written through United National Insurance Company.

Please allow us to assist you or your insurance agent. Contact Steve Sprows or Connie Hatch at Assurance Services, Inc. for details.
Trolley System Back on Track Following Four-Year Struggle

After several politically turbulent years in the planning process, the Galveston trolley system will begin service later this summer. Four turn-of-the-century-style cars will circulate on the 4.5-mile route between the seawall and the downtown historical districts. A new arch by Aldo Rossi also will be built on 25th Street at the Strand for the opening.

A trolley operated on the island from 1866 until 1938, when a new bus system took over public transportation. The idea to revive the trolley grew from 1973 to 1983 in four master-planning efforts. The proposal, as one plan stated, called for a "network of transportation and linkage systems to draw together the disparate existing and potential visitor attractions."

In 1984 the city council and George Mitchell, local real-estate magnate and Strand revitalization activist, hired Barry Goodman Associates, Inc., to seek funding for the project. The council set a capital budget of $10.7 million, and the Urban Mass Transit Administration (UMTA) awarded a grant of $8.56 million in late 1984, the first such grant for a rail system in Texas. A matching grant of $1.4 million came from the Texas Department of Highways and Public Transportation, and $749,000 was given by Mitchell and the Moody Foundation. UMTA provided a supplemental $1.24-million grant in 1987. Design and engineering were done in 1985 and 1986, and construction bids were taken in March 1986.

Although the city council was behind the project unanimously, some citizens feared the use of local tax funds and felt that the council was unresponsive. The local police association focused this unrest in July 1986 with a petition for a referendum on the trolley, arguing that the issue was too important for the council to act on without a public mandate. The same day the petition was submitted, the council authorized $2.2 million to buy four trolley cars.

In the debate leading to the January 1987 referendum election, the police union voiced the common concern that the grant money should be used for more pressing problems, such as street repairs and bus-system improvements. Opponents claimed that the trolley would lose money and that taxpayers would wind up subsidizing its operation to the benefit of special interests. The grant, however, came from a restricted UMTA capital grant program for use only on light-rail transportation systems.

NEWS, continued on page 15

Galveston's new trolley connects the seawall, at bottom, to downtown historical districts, at top.
Southwestern Splendor

An environment that restores—and revitalizes. Soothing the senses and refreshing the mind. That's today's bath—from Eljer.

This Eljer bath features the Gentility™ six-foot whirlpool bathtub, elongated Windsor™ toilet, Valencia™ bidet and Jasmine™ lavatories—all in fresh Platinum. Whether your taste runs casual or formal, there are elegant Eljer products to suit your every mood.

ELJER
Capture the Elegance
Custom Masonry

Texas American Bank
Amarillo, Texas
This 31 story bank towering above the Crown of Texas features an 8 Rib concrete masonry wall material. The Owners and Architect selected it for its rugged texture and durable beauty. From early morning to sunset, the unique texture creates an ever changing appearance, as the sun circles the building.

This 31 story pinnacle is a monument to the strength and esthetic beauty of these concrete masonry units. They surround the stairwell core on the north and the facilities core on the west and enclose the five story parking structure at the base of the building.

When the sky is the limit for your tallest dream . . . depend on strength and dazzling beauty . . . concrete masonry units.

Spectra-Glaze®

Colonial National Bank
Fort Worth, Texas
Spectra-Glaze® is the Architect’s glaze of choice. Bright Red Glaze from the drive thru — throughout the lobby area and the hallways leading to the vault.

Your choice when you require the highest quality wall finish, giving you beauty, durability, low maintenance, and economy. Chosen by the Owner and Architect for its vibrant bright, red color . . . a custom color of their preference. For an exterior that combines beauty with performance, specify Spectra-Glaze®.

Louisiana Concrete

Featherlite Building Products Corp.
Marketing Department
P.O. Box 31058
Amarillo, TX 79120
(805) 373-6766

Circle 14 on Reader Inquiry-Card
The referendum, which included an amendment to the city charter that would require a referendum election before the council could establish a mass-transit system, passed on the strength of high voter turnout. City and consulting attorneys, however, advised that the voter-backed amendment did not apply retroactively to the trolley project, and in February the council proceeded with work on the trolley.

In response, a grass-roots organization called We the People filed a recall petition to oust the unsalaried mayor and four council members in July 1987. The group claimed that the council paid too much attention to special interests and that the referendum’s “no-confidence” vote demanded a new council. After another vitriolic campaign, the recall was defeated by a 56.3-percent majority.

Throughout the political maneuverings, little attention was given to the trolley’s practical design and operation. There is no apparent coordination with other planning projects, such as the revitalization of the derelict downtown mall. The trolley is touted as a way to reduce traffic congestion, but no parking provisions have been made for those using it.

The trolley system consists of four diesel-electric, self-propelled, non-air-conditioned, steel-wheeled vehicles—two red and two green. Service was to begin in May, but the delivery of the first two cars has been delayed. The standard-gauge, girder-rail track is set flush to the pavement. A round trip on the 22-stop run will take about 25 minutes and the standard fare will be $1, the same cost as a bus ride. Former Houston architect Jeffrey K. Ochsner was involved in the design of the trolley stops, the maintenance building, and vehicle style selection. The system is planned to transport 680,000 riders annually, two-thirds tourists and one-third residents, and will be operated by The Park Board of Trustees.

—Gerald Moorhead
Shapely expression.

Now, architectural expression with brick takes on new shape and uniformity.
Elgin-Butler Brick Company's new brick shape machine allows custom designed shapes on a production line basis. Cost competitive. Versatile. Special textures, colors and coatings.

Possibilities for innovation expand. Depth, shadows, deep reveals and consistent curvilinear form are realized with artistry and economy.
Brick endures as the creative medium.

Check the Yellow Pages for our nearest sales office, or phone us today for complete information.
Elgin-Butler Brick Company
Post Office Box 1947, Austin, Texas 78767
(512) 453-7366.
Texas Architect
114 West 7th, Suite 1400
Austin, Texas 78701
ONE HUNDRED “CANDLES” ADORN CAPITOL DOME FOR CENTENNIAL

Instead of creating the “World’s Largest Birthday Cake” for the State Capitol’s May 7 centennial celebration, organizers made the dome itself the cake by encircling it with 100 10-foot birthday candles.

The Heritage Society of Austin, Inc., a 35-year-old, 2,000-member group that has awarded more than $1.2 million for renovation of Austin’s historic buildings, sponsored the event, conceived and directed by Austin architect David Hoffman, principal of David Hoffman & Company and president of the Society.

Hoffman was not sure at first, he says, that his idea for using the Capitol dome as a birthday cake would be well-received. But not only did the Centennial Committee, which oversaw the planning of the celebration, approve the scheme, it suggested that the candles be lit for the entire week following the May 7 anniversary instead of the three days Hoffman originally proposed.

Thirty volunteers built and installed the candles using eight-inch-diameter cardboard Sonotubes, which were painted white and topped with 60-watt large-filament clear bulbs. The oversized candles did not fit in the building’s elevators and had to be walked up four flights of stairs, then maneuvered up a narrow, spiral staircase to the base of the dome.

The dome’s balustrade is divided into 20 segments, allowing the volunteers to strap the 100 candles symmetrically in intervals of five candles per segment.

The candles were lit for the first three of the planned seven nights, but had to be removed when rains from the first night caused the cardboard tubes to sag and lean. Still, organizers say, the candles were a successful reinterpretation of a birthday tradition.

— RDT

For more information, call us today.

Noel Sullivan
(214) 702-2370
1-800-441-1307
13555 Noel Rd. LB 18
Dallas, TX
75240-6604

Joe Fosco
(713) 665-1194
P.O. Box 270779
Houston, TX
77277-0779

Roy Schaufeile
(512) 657-1422
8108 Forest Dawn
San Antonio, TX
78233

Roofs in Texas fail all too soon! We can change that with the IRMA* from Dow Chemical. The building pictured is over 10 years old and the original roof is still going strong. Conventional roofs often fail before this age in Texas, due to the extremes in temperature. The IRMA is able to withstand 100 degree temperature swings due to its unique configuration. Dow covers the membrane with tough, moisture-resistant STYROFOAM* Brand Insulation. This protects the membrane from temperature extremes, so you can forget about it.

To learn more about the time-tested IRMA, call one of our representatives.

For Texas Architect July August 1988 Circle 19 on Reader Inquiry Card

*Trademark of The Dow Chemical Company

Photo by Texas Parks & Wildlife Department, Austin.
If He had to do it all over again, He'd still choose stone.

There are some people who feel building with masonry is ancient history. That today, there are just more practical materials to use. Well, that's their opinion, but we don't happen to agree. Because the same practical reasons people built with masonry ages ago, makes even more sense today. The fact is, for a long time now masonry has been recognized for its natural building qualities, its natural beauty, its natural insulating properties, and its natural durability.

That's why some of man's greatest contributions to the world have been made with stone. There's even one... that wasn't contributed by man. So you see masonry was made for building. And today you'll find masonry has reached even greater heights in design flexibility and versatility. After all, He chose it to carry His message then, why not choose it to convey your concept, today.

To find out all the facts about creating with masonry, call or write us.
Most architects running their own firms don't have time to become experts on retirement plans. But some kind of organized retirement program is usually required if architects hope to lure and retain quality staff as well as to provide for their own future needs. The good news from the present tax laws is that some very attractive alternatives have been created. These give small companies some choices that were once available only to big firms.

A retirement plan, for the purposes of this brief overview, is a government-approved plan that allows money to be put in an account for the eventual retirement needs of employees. The money in this plan is tax-deductible by the entity contributing the funds and is not taxable to the employees until it is taken out of the plan at retirement or termination.

The most popular plans share some characteristics. For example, all allow flexible contributions, which can be adjusted as often as necessary, from nothing up to 15 percent of the payroll. Using one of these plans, the company has the advantage of not being locked into any future expense beyond the government-required filing cost (which can vary significantly from plan to plan).

But there are important differences separating retirement plans into two general categories, known as "corporate" and "SEP."

A corporate plan is more flexible, allowing the employer more control over employee eligibility, and limits when employees can take their money. A typical corporate plan vests employees—transfers ownership or control of the retirement funds—gradually. Corporate plans require a significant amount of legal paperwork that results in a minimum cost of $500 to set up a plan and $750 for annual filings.

An SEP plan, by comparison, is less flexible but easier on the employer's pocketbook. Under an SEP plan, all employees are eligible and 100-percent vested. There is little government reporting, so administrative expenses are low: a typical SEP plan is available with annual administration expenses as low as $10 per employee per year.

Employee retirement plans bring many benefits to an architecture firm, and recent tax-law changes have created plans to fit even the small, struggling firm's pocketbook.

Whether a corporate or SEP plan is used, someone still has to make contributions. The traditional "profit-sharing" plan, under which the employer contributes all the money, is the most common. In such an arrangement, the company adjusts contributions annually, depending on profits.

The tax-law changes that went into effect in 1987 made IRAs nondeductible for many people, resulting in a lot of interest in "401(k)" or "incentive savings" plans, which allow employees instead of employers to make contributions. Under these plans, employees authorize employers to contribute between one and five percent of their salary to the plan. The contribution can be deducted by employees and can be invested as they choose. Until recently, these were available only in conjunction with corporate plans and were even more expensive to administer than the corporate plans themselves.

In late 1987, however, the Salary Reduction SEP, or SAR-SEP, became available to small employers. SAR-SEP plans work like 401(k) plans, but they have the low administrative costs previously reserved for SEP plans. To be eligible for a SAR-SEP plan, an employer must have fewer than 25 employees, and at least 50 percent of them must participate. As with its big brother the 401(k), there is a limit on the amount employers can contribute compared to employees. Nevertheless, for the frugal or struggling practice, SAR-SEP plans provide an opportunity to create a meaningful retirement plan for a total annual cost of $10 per employee.

In addition to the obvious benefits to the company in employee morale and retention associated with retirement plans, there are a number of often-overlooked benefits to a firm's principals. The first: because a company's contributions are allocated in relation to the employee's income, the majority of any contribution often goes to the owner.

The retirement plan also provides the business owner with a way to stabilize earnings and plan for taxes. The retirement-plan contribution does not have to be made until the end of the year, when the owner knows what the year's profits will be. When corporate plans are used, retirement-fund contributions can be postponed until the corporate income tax return is due.

Regardless of the plan chosen, employers and employees will benefit from efforts undertaken now. And, while the right plan for each firm depends on the situation, new tax laws now allow a fuller range of choices.

Bob Frater, a principal of Houston Asset Management, Inc., is a Certified Financial Planner who specializes in working with architecture and engineering firms.
THE CRYSTAL PALACE
DISSIMULATED

By Richard Ingersoll

In the Age of Information, most design market centers in Texas cities bank on strong exterior images. Only one can be called an integrated work of architecture.

Most major new architectural statements in Texas are made along the freeways, where the sign value of architecture has become as important as spatial considerations. Like billboards, today's freeway buildings strive for legibility, recall, and seduction.

Five minutes from downtown Dallas on I-35E is a consummate example of the type: a contemporary replica of the Crystal Palace called the Infomart, so anachronistic and visually arresting that passing motorists have reportedly made this the most unsafe stretch of road in the city. Opened in 1985, this latter-day Crystal Palace is both easy to recognize and indulgently nostalgic. Using an epidermis of applied aluminum struts and mirrored glass, the exterior simulates the spindly appearance of Joseph Paxton's Victorian original. Inside, however, one finds a very unsparingly concrete pier-and-slab atrium. The Infomart thus exemplifies the sort of architectural dissimulation advocated by Robert Venturi. The irony is heightened by the fact that the nostalgic shell contains showrooms devoted to advanced computer technology.

Five minutes from downtown Houston on I-59 is another new freeway building, which also houses a trade mart. Innova, which opened in 1984, presents the motorist with a metaphor rather than a historical image—it is a shiny black box, like a Chinese lacquered toy, that has been pulled apart to reveal its secret diagonal core. Though it houses functions similar to those at the Infomart, Innova rejects the architectural strategy of dissimulation. Instead of laying a sign over the structure, the stepping motif carved into the building's long sides expresses the internal order; at the same time it provides an easily identifiable logo for the place. The ingenious diagonal stacking of double-height spaces on the interior creates a liberated section that transfigures the conventional atrium type.

MARKETING AMERICA'S CHANGING ECONOMY

Infomart and Innova are both products of a widespread trend during the last decade to create permanent showrooms for office-furniture and business-machine manufacturers. In the next year, nationwide, a dozen regional design centers will join the existing half dozen, along with three more high-tech trade marts opening in Santa Clara, Calif., Washington, D.C., and Atlanta. This follows the boom in office construction and the ascendancy of the service and information industries, which have been rapid displacing manufacturing in the American economy. Homage to the "information revolution" permeates these new trade marts as an ideological rallying call.

The proliferation of the trade mart has led to its distinct speciation, with projects ranging from converted warehouses, such as the Icehouse in San Francisco, to glorified variations on the warehouse, such as the Merchandise Mart in Chicago. An increase in the social uses of trade marts, however, has brought them closer to the program of the great exposition halls with top-lit atriums or galleria features. Cesar Pelli's Pacific Design Center in Los An-

The Infomart in Dallas, designed by Martin Growald of Fort Worth, uses recycled aluminum and reflective glass to echo the imagery of Joseph Paxton's 1851 Crystal Palace in London. The nostalgic exterior wraps around a conventional concrete building housing showrooms for advanced technology.
geles of 1973 achieved the definitive synthesis of the warehouse and exposition-hall types. The “Blue Whale” became a paragon of memorable exterior design and ample interior circulation and social space. That the Infomart and Innova buildings present such differing interpretations of this formula must be traced to their planning and ultimately their developers.

DALLAS MARKET CENTER

The Infomart is one of eight projects known collectively as the Dallas Market Center (DMC), which covers 175 acres (80 for parking) and provides the largest square footage (nearly 10 million) of trade marts in the country. This modern caravansary, which includes two major hotels, is strung along either side of Stemmons Freeway, creating a unique urban zone, developed and mostly owned by companies belonging to the Trammell Crow family.

The first project, which established a base for this veritable empire of showrooms, was the 1955 Decorative Center, the country’s first design center. Designed by Jacob S. Anderson, it is a superb and original response to climate and program. The single-story loft space is wrapped around a tree-shaded parking court; the interior perimeter is composed of stylized porticoes worthy of the Italian Rationalists. The Decorative Center represents Texas Modern at its noblest, and it is sad to see alterations being made to its portico (the flat pylons are being replaced at the corners by rounded columns).

The remodeling of the Decorative Center is an adjustment to the surrounding area of warehouses, recently rechristened the “Design District.” The tenants convinced the developers to
keep the area’s low scale and recycle the existing 30 warehouses, rather than build another multistory design center. Lucila Peña, the project coordinator with Trammell Crow, has made a lively attempt to interrelate the structures, and the cosmetic results are like a postmodernist costume party, including a Gravesian revamp of the Contract Design Center by WZM and an Eisenmanesque shifted grid for the Pace Gallery by Sullivan Key Merrill.

Aside from the Trade Mart of 1959 by Harold A. Berry and Harwell Hamilton Harris, none of the subsequent projects for DMC, particularly Beran & Shelmire’s massive 15-story World Trade Center (1974-79), are up to the architectural standard set by Anderson’s Decorative Center. Nor has there been any attempt, despite their common ownership, to coordinate the projects—neither style nor street system unifies the buildings, and all are set adrift in a sea of parking lots.

INFOMART: WRAPPING FOR A STANDARD PLAN

The formula for each of the later DMC projects calls for a central atrium giving on to loft spaces accessible from looping corridors. This has been applied so assiduously by the developer, both in Dallas and in other cities, that when it came time to plan the Infomart, some square-footage was leased—reportedly before the architect was hired! The floor plan was based on the successful plans of other DMC projects, the only difference being that tenants on the perimeter were to be provided with windows. After proposing dozens of facade solutions that ranged from Penn Station to Centre Pompidou, architect Martin Growald remembered that the major holdout tenant, IBM, had used a Victorian cast-iron display for the 1964 World’s Fair and was notoriously anglophilic. He came across what he said “looked like a stroke of genius, in retrospect.”

The Crystal Palace captured the imagination of architect, developer, and principal tenant alike. And it was cheap; the 1.5-million-square-foot building cost $36 per square foot (the skin, made appropriately from recycled aluminum and reflective glass, cost $20 per square foot). The developer insisted that the glass be mirrored so that the tenants could not be seen from the outside; thus, despite the fact that the strut details were copied from Joseph Paxton’s working drawings, the Dallas Crystal Palace will never look like the original.

For the dissimulation to occur, the interior of Infomart necessarily had to contradict the exterior. The surprise of finding this mirage from the 19th century, and then discovering a normal building inside, is genuinely amusing. It has been reported that, when he visited the building, a tear came to Prince Charles’s eye—if so, it was likely from laughter.
Infomart is not just an instance of a paraphrased facade, but also of a borrowed plan, and while one might appreciate the dissimulation as part of the 1980s zeitgeist, the developer’s overconfidence in the tried-and-true (and cheap) plan subverts the program. Over half of the 880,000 square feet of leasable space is stuck off back corridors that have no visual connection to main social spaces; many special functions, such as the two orientation centers (the EPOCenter for electronic publishing and the IDEA Center for integrated display of enterprise automation), seem deserving of special spaces, yet they are relegated to indistinguishable loft space and are difficult to locate. The restaurants on the ground level are overpowered by the high ceilings, and the 500-seat auditorium, which should have centrally placed access, is shuffled to the far reaches of the ground floor. The transparent elevators are a hotel-lobby cliche. The outsized Edwardian moldings at the entries to the ground-floor exposition halls, the replica of the original Crystal Fountain, and the numerous London telephone booths create an atmosphere of kitsch that is only slightly remedied by some of the individual showrooms, such as the elegant AT&T display, designed by RTKL in Dallas (see accompanying story).

HOUSTON DECORATIVE CENTER

Trammell Crow’s companies have developed numerous trade-mart facilities outside of Dallas, including the Decorative Center in Houston. The Decorative Center, initiated in 1975, was not unlike its namesake in Dallas. It occupied one two-story and two one-story warehouses, all with ample parking and circulation space in between. Houston, which in the 1970s had the greatest volume of office construction in the country, was ripe for a larger facility, and when Trammell Crow got wind of the plans for Innova, he decided to add a tower to his own project. Both enterprises struggled for the right to use the name “The Houston Design Center”; Innova won, but later dropped the name.

For the expanded Decorative Center, opened in 1984, Morris*Aubry Architects showed a 10-story reflective-glass tower between the existing structures. It was a difficult site, in a remote sector of the Post Oak area, and though its position on Woodway Drive demanded attention, the major entry had to be placed on the back of the building, off the parking lots. The resulting disorientation is part of an overall identity crisis, pitting profile against the developer’s urge to save money. The atrium was de rigueur, but the space left over for it on the small site was
so minimal that it would have resembled a dumbwaiter shaft if continued on all 10 stories; it was decided to roof it over at the fifth floor, making two stacked five-story atriums—the lower one, serving decorator showrooms, is round in plan, with classical newel posts, while the upper one, serving contract furniture, is square with stainless steel railings. About 30 percent of the showrooms are placed at the ends of corridors, hidden from the atriums.

After four years of operation (admittedly during an economic downturn) there is still a great deal of unrented space (as there is at Innova), and the management, realizing the commercial potential of public events, carved up some of the showroom space into conference rooms. Had the original program included such standard facilities, as it should have, they might have been much more effective. The landscaping, which might have softened some of the earlier design decisions, is clumsy, using fountain pools that are tiled like public restrooms. A restaurant on the ground floor, designed by Charles Moore, adds some life, but not enough.

As shown by this project, the marketing methods of Trammell Crow seem either to preclude making architecture part of the package, or rather they isolate it as a facade wrapping or as a Charles Moore restaurant, instead of something essential to the workings of the building.

INNOVA: PROCESS AND BUILDING

In contrast, Innova was created through quite a different process. The developers and architects interwove the different strands of program and design, resulting in something that can truly be called a work of architecture. Jointly developed by Kenneth Schnitzer's Century Development and the Mischer Corporation, the plan of Innova came from a critical analysis of other trade marts. Circulation was identified as a key factor and influenced the choice of Cambridge Seven Associates as architects because of their success with moving people in other projects, such as the Baltimore Aquarium and the San Antonio Museum (Lloyd Jones Brewer & Associates, Houston, were the associated architects).

Innova's major design innovation is what principal-in-charge, Charles Redmon, FAIA, calls "the circulation canyon." This is a diagonal sequence of two-story atrium spaces creating open, well-lit social spaces throughout all 10 stories, without the oppressive vastness of a Portmanesque atrium. It is indeed a "free section," to be added to the "free plan," as the 30-foot column module allows both lateral and vertical flexibility. The escalators are placed...
Innova's "free section," a diagonal sequence of two-story atrium spaces, provides an exhilarating sense of the accessibility of the whole building at once.
cross-axially to the diagonal core, and as one meanders through the building, the views are kaleidoscopic—no two are the same. Nor are two floor plans alike. A lesson learned from the Pacific Design Center, where the preferred spaces are in the top two stories around the galleria, was to offer every floor galleria-like exposure. All of the showrooms have visual access from the escalators. The central showrooms on the odd-numbered floors have glazed ceilings, transparent to the balconies above, and all of the showrooms are required to maintain unobstructed plate-glass facades, so that there is a maximum of visual penetration.

A pragmatist might argue that circulation in a design center is not very important, since patrons already know where they are going and have not come to browse. Innova provides a refreshingly “cultural” rebuttal to such an argument, proposing that the requirements and uses of contract furniture are related to those of information technology and that grasping the full range of what is available is a vital aspect of making proper decisions in the age of information. Innova is closer to a museum of the white-collar world than a furniture warehouse.

On the ground floor, the granite-paved lobby is lined with display kiosks advertising the tenants above. There are also three seminar and conference rooms off the lobby which can accommodate a total of 300 people (there are two other conference rooms on the 10th level accommodating 400 more). The showrooms, some turned out by top designers, include Frank Gehry’s SonarHauserman, Janita Lo’s Steelcase/Stow & Davis, and the mural for GE by Peter Waldman. At the top of the building is a restaurant with a view over Houston’s sprawl. Also on the 10th level is a remarkable indoctrination exhibit designed by 3D/International, Houston, with a breathtaking multi-image show: “Integration, a Journey, not a Destination,” that explains the relationship between office machines, furniture, and productivity. This attempt to wed high technology and design was the enlightened promotion of Ron Blankenship, the executive director of Innova, who has been involved in its programming from the start.

Indeed, Innova integrates not only contract furniture and computers but other more mundane machines, such as automobiles and trucks. The trucks can plug in gracefully like building components to the diagonal delivery notches on the back side of the building, where they have easy access to the freight elevator. Cars enter on the sides and have been provided 450 places on four levels inside the building.

Innova is not surrounded by vast parking lots but it nevertheless looks a little stranded on its site, since it was meant to be part of “phase three” of Greenway Plaza. The earlier phases of the development are perhaps the worst imaginable derivatives from Le Corbusier’s Radiant City: frozen towers sheathed in reflective glass with no clear entries and acres of unusable surrounding space. The parking garages in the plinths induce acute separation anxiety. The un-built phase three, being more sensitively designed, was meant to save Schnitzer’s reputation as an architectural patron, and Innova was a good beginning. Innova was an expensive building, costing $20 million more than Infomart but with one-third the space.

Quality rather than gimmickry was desired for Innova’s exteriors. The highly polished black Impala granite, alternated with grey granite bands, enhances the crystalline purity of Innova’s geometry, making it like a solid block split by a lightning bolt. Cambridge Seven unwittingly allowed a dissimulation to occur, however, by using a highly reflective veneer. So deceiving is its surface that the Boston Chapter of the AIA gave it an award, lauding it for the outstanding use of opaque glass!

The 1851 Crystal Palace was admired not so much for its beauty as for its thrilling application of the technological possibilities of the Industrial Revolution. The four-month assembly of several thousand prefabricated cast-iron parts was celebrated as a triumph akin to the opening of a railroad, but it was also instantly reviled by aesthetes, such as John Ruskin, as evidence of the death of the soul (how he would have suffered at Infomart!).

If Paxton’s original communicated truths about the industrial process, does the modern impostor do as well for the age of information? Clearly the separation of sign and function is akin to the mobility of content through mass media, but a truly “informational” architecture would be continuously transmutable according to changing climatological and social conditions. The static treatment of the plan at Infomart subverts any “informational” pretensions; it is the most unimaginative, rote application of an example from another industrial age, a denial of options.

Architects using CAD systems have learned that computers do not really do the work but enable one to better coordinate the variables involved. It may then be the case that the architec-
Innova's polished granite skin was mistakenly praised as an outstanding use of opaque glass. Its diagonal truck decks make for easy tenant access.

Innova: Section

ture of the Information Age will not look like anything different. Only by applying the wildest hyperbole might one see an analogy between the overlaying footprints of Innova, connected by interlacing escalators, and the assembly of computer chips. Innova is unmistakably descended from the modernist project, using industrial methods explicitly. But in the extraordinary flexibility of its "liberated section," with its sense of accessibility to the whole building at once. Innova uncannily approaches the process of the computer by interfacing variables in simultaneity. It is the standard by which other Texas design centers must be measured.

Richard Ingersoll is editor of Design Book Review.
When Steelcase, Inc., acquired Stow & Davis in May 1985, it also acquired a problem: How could it incorporate Stow & Davis' sizable line of highly detailed traditional furniture into the high-tech aura of its Innova showroom?

The answer was an entirely new space—an airy 4,700-square-foot expansion, designed by Janita Lo & Associates, Inc. Detached from the main showroom by a public corridor, the addition was connected visually by an unobtrusive black-marble floor grid. A dramatic executive group sits against a massive mahogany-veneer column beneath a shallow trompe l'oeil vault which emphasizes the axial arrangement of the display spaces. The painted vault also rescues this windowless volume from warehouse dreariness, and marks the fabric and wood selection area. Along the cross axis, ebony-framed etched-glass doors enclose complete office suites that can be opened for display. On either side of the suites, systems components feature rich woods and formal simplicity.

Careful attention to materials was critical, says Senior Project Designer Janita Lo. "The concept was to create a museum-like environment," she says. "We used many common threads" from the original showroom—the granite floor, subtle gray carpet, ebony, and smooth ceiling—adding marble accent flooring, mahogany, and white silk wallcovering to harmonize the urban Stow & Davis line with the Steelcase showroom next door.

The addition establishes its own conservative feel without losing touch with its energetic predecessor.
Los Angeles superstar architect Frank Gehry says that in designing the SunarHauserman showroom at Innova, he had to deal with “all variety of product and design” treating disparate pieces “in an even and neutral way.”

His solution, he says, was to break down the scale of the 6,900-square-foot showroom by following the strategy used in his 1981 house for a filmmaker in Los Angeles and other recent works. This involves creating a separate architectural form for each function and scattering them around the site with apparent artlessness. Treat objects as if they were “in a still life and imagine wandering around through them,” Gehry says. “You would walk into a space, through a space, back into a space, and as you discovered the spaces you would also discover product.”

For the first major display area, Gehry exploded SunarHauserman’s “Doublewall” panels into a large-scaled lattice room-within-a-room. Elsewhere, the company’s panels are used more conventionally to form solid, if surprisingly sculpted, enclosures.

The drafting room, for example, is an inverted, truncated pyramid with a wide oval window, while the conference room’s curved wall has a large rectangular window. Furniture by Michael Graves, Arata Isozaki, Neils Diffrient, and others, along with the company’s office systems, is displayed in the interstices created by these volumes. Throughout the main display area, reflecting fluorescent and track-mounted incandescent lamps above Gehry’s wire-glass industrial ceiling produce a cool light with a slightly minty cast. Objects are seldom dramatized by light or placement, but look like street furniture in a quiet country town.

A kitchen, storage areas, and staff areas are arrayed along a perimeter wall.
PROJECT: SunarHauserman Showroom, Innova, Houston
ARCHITECT: Frank O. Gehry & Associates, Inc. (Ann Greenwald, project architect)
ASSOCIATED ARCHITECT: Brooks/Collier, Inc., Houston,
CLIENT: SunarHauserman
CONTRACTOR: McGinnis Construction
The project team at Gensler and Associates/Architects, Houston, recognized that the 10,000-square-foot Haworth showroom at Innova would be seen not by the office workers or even by the managers—the users of Haworth office systems and furnishings. Instead, the team members knew, visitors would tend to be other architects and designers—people to whom an impression of elegance, high quality, and visual clarity would be much more important, at least initially, than images of functionality and value relative to cost.

At the showroom’s entry, the team created a hard-edged, dramatic space. Chairs draped in heavy-folded black leather and darkly gleaming furniture stand on a glittering black stone floor. They are backlit by the glow of quartz-halogen lamps reflecting off limestone-clad walls. The setting treats furniture not just as art, but as black magic—arcane artifacts whose proper use is known only to the initiated.
Beyond the entry the space flows into the working showroom; here, subdued materials in quiet hues set off the Haworth office systems and furnishings. Painted accent walls and accent carpet tiles allow the showroom to be updated with minimal effort and expense. The conference room, kitchen, and staff areas are grouped around the perimeter of the showroom space and provide a transition from the main showroom area back to the rigorous entry gallery.

PROJECT: Haworth, Inc., Houston Showroom at Innova
ARCHITECT: Gensler and Associates/Architects, Houston (Bad Luther, project principal; Thomas Giannini, project manager; Linda Tradewell, interior designer)
CLIENT: Haworth, Inc.
CONTRACTOR: Skyline Construction
CONSULTANTS: I.A. Naman + Associates, Inc. (architectural lighting)

SOURCES:
Carpet: Milliken carpet tiles; Wall coverings: Jack Lenor Larsen; Fabric ceiling: Joel Berman; Lighting fixtures: Forms and Services, Inc.; Limestone: Providence Marble Corp.; Furnishings: Haworth

Haworth Showroom: the working display area employs muted colors and softer finishes.
AT&T'S DALLAS TECHNO-PALACE

By Joel Warren Barna

Inside the showroom, between a custom-made ceiling of gridded slab aluminum and an industrial-grade wood floor (required for expected high traffic but also visually complex), is a dramatically lit, exotic landscape of one-of-a-kind objects showcasing AT&T equipment and services. A games kiosk, topped by a stainless-steel pyramid, scintillating ranks of video displays, two crisply detailed triangular aluminum-and-glass reception desks, terrazzo columns with crushed glass embedded in them, and a theater drum with curved perforated-metal panels—all these allude to arrival not in a lowly showroom but in a forbidden city of exquisite industrial treasures, a techno-palace. “We wanted to create a ‘technical’ space that wasn’t intimidating,” says Sailor.

The executive briefing center is reached from the showroom through a forced-perspective corridor, with another sinuous wall, this time of cherry paneling, mak-
ing a cross axis. Here, gridded translucent walls wed office-like details to arts-and-crafts serenity.

The communications planning center, with its no-nonsense, corporate atmosphere, has a separate entrance and lobby dominated by a giant Roy Lichtenstein mural, two classrooms, four “huddle rooms,” a theater, a teleconference center, and a hospitality suite with yet another entrance.

“We had a large space with a lot of different functions that had to be separate but connected at the same time,” says Sailor. “We tried to allow the geometry to set up the sequence of the spaces—that and the textures of the materials. It was a chance to use simple things, but with a twist.”

PROJECT: AT&T Customer Technology Center
ARCHITECT: RTKL Associates, Inc. (Project Team: David J. Brotman, principal-in-charge; Lance K. Josal, project manager; James Sailor, project designer; David Cassidy, construction administrator)
CLIENT: AT&T Real Estate, Dallas
CONTRACTOR: James D. Iazzarelli Co., Irving
CONSULTANTS: P.H.H./Neville Lewis Associates, Inc.; Adams Shadrack Davis (MEP); Joiner-Rose Group (acoustical); Kimball Audio-Visual, Inc. (audio-visual); Oberlander Associates (project management); Michael E. Thomas and Associates Plus (art)

In the executive briefing center, the gridded translucent walls wed office-like details to an arts-and-crafts serenity.
PALAZZO TO PLUG-IN: OFFICES ARE EVOLVING

By Joel Warren Barna

Can the “virtual office” save the American economy from stagnant white-collar productivity? Researchers say it’s the critical question for the next decade.

A T&T, the telecommunications giant, has been running a series of television advertisements that precisely catch the sense of alarm that seems poised to engulf the American business world.

Media critic Barbara Lippert calls them “slice-of-death” ads. In one called “Banquet,” she writes, the boss excoriates a hapless manager named Murphy, who ordered the wrong computers, in front of colleagues and spouses during a black-tie dinner. “Manufacturing can’t hook up with sales.... Brilliant, Murphy,” the boss says. In another, a middle-aged department manager writhes, obviously contemplating the demise of his own career, while a younger colleague tells him off for “blowing his budget on stand-alone” computers.

Why the sudden corporate angst dramatized in these ads? Because American management now finds itself in a much more competitive world. Not only are foreigners grabbing market share, but the 1980s frenzy of mergers and buyouts means that anybody—especially middle managers—could be job hunting without warning. Business is tougher than ever.

And, as if that weren’t enough, there is a productivity crisis. After World War II, white-collar office work—mostly in “service industries”—edged out manufacturing to become the largest sector of the American economy. The problem for American management is that office-work productivity has been essentially stagnant during that period.

Steven Parshall, vice president and director of research at CRSS Houston’s Officing Laboratory, says “We’re really facing a national crisis of productivity in the global market.”

Michael Tatum of the HOK interiors group, Dallas, which has designed major corporate offices, says, “You can’t expect much from an economy when its largest segment is stagnant.”

THE AUTOMATED OFFICE: A SHORT CIRCUIT?

As recently as 1983, in Planning the Electronic Office, authors Elaine and Aaron Cohen asserted that office productivity changed little up to the last decade because an “ever-growing employment pool allowed corporations and government agencies to avoid major equipment expenditures.... Rather than tie their monies into office mechanization and, later, automation, whenever expansion occurred they simply hired more people.... Inefficiencies became rampant.”

The Cohens went on to suggest that increased automation of the work process in white-collar industries would solve the productivity problem. “The electronic technologies promise to alleviate...difficulties and, at the same time, to create a professional and content labor force by factoring out the routine and uninteresting,” they wrote. “Techniques to effect this changeover depend, in part, on industrial engineering methods that for nearly a century have been basic to factories.”

In fact, even though hundreds of millions of dollars have been spent on office automation equipment over the last decade, office productivity continues to slump.

Wrote Duncan Sutherland, director of CRSS’s Officing Laboratory and a nationally recognized thinker on the topic, “To be sure, information technology has worked wonders in certain situations. For example, enormous productivity gains have consistently been reported for clerical workers who swapped out their typewriters for word processors.” Results have also exceeded expectations “where information technology has been targeted at clearly defined goals” such as reducing in head count, according to Sutherland.

But, Sutherland says, productivity—work produced relative to cost—has actually been declining among white-collar workers since the office-automation boom.

Says HOK’s Tatum, “We’ve tried the technology pill, and it turned out to be a placebo.”

CRSS’s Steven Parshall says, “Trying to increase an organization’s productivity by squeezing increments of improvement from individuals won’t work. In fact, the whole idea of
measuring productivity as if the office were a factory is a mistake. Only when businesses develop a new metaphor for office work will the quantum leaps in productivity that are needed going to happen."

Getting there, however, may take undoing a century-old a tradition.

100 YEARS OF OFFICE WORK AND DESIGN

In the 19th century, businesses were relatively small and office workers were relatively rare by today's standards. The workers had daily contact with business owners and enjoyed a higher social status than factory workers. Their position was analogous to that of craftsmen before the advent of mass production, since they had responsibility for seeing business transactions through from start to finish. After the turn of the century, however, offices grew larger and more departmentalized, based more and more on the factory model. Workers were assigned to groups that performed only a few tasks, and "bullpen" work areas, which allowed managers to keep a sharp eye on workers, became common.

British architect Adrian Forty, author of Objects of Desire: Design and Society from Wedgewood to IBM, charts successive erosions in the status and autonomy of office workers, particularly as the theory of "scientific management," emphasizing time-and-motion efficiency, developed after 1900. Forty shows how the office desk, both as a functional object and a symbolic place-marker, evolved under these influences.

The typical clerk's desk of the 19th century, like that used by the boss, had a high back and perhaps a roll top, along with numerous pigeonholes and drawers in a pedestal base. "Such a desk represented a small private domain...[encapsulating] the responsibility, trust, and status given to some clerks" in an era when office workers could still control the pace and content of their work. Forty writes, "To the supporters of scientific management, the desk had great significance as the main piece of equipment used by the clerical worker, and it was the first item to be redesigned in the interests of greater efficiency."

By the early 1910s, adherents of scientific management began designing flat-topped desks with legs instead of pedestals and only a few shallow drawers. The design was praised because it made the work surface open to inspection, so that "any tendency to defer until tomorrow what can be done today is nipped in the bud," and because workers could not misplace documents if they had no storage drawers. At the same time, rigid systems of standardization were developed to control each task and how it was performed, and the use of messengers or conveyors to move files to and from central storage further decreased the worker's control over work flow.

"The clerk now worked to a tempo imposed by management at a desk that had been designed and organized to prevent its being used in any way as a private space," Forty concluded. "The change in desk design in America during the 1910s reflected, and was to some extent responsible for, the change in the status of the clerk from craftsman to proletarian—the employer was buying not only his or her time, but also the right to supervise every movement."

The industrial appearance of typewriters, telephones, adding machines, and other office equipment used by non-management personnel during this period—particularly when contrasted with the more "domestic" finishes and materials used in office equipment for managers—also showed a deliberate connection between office and factory.

THE HUMAN-RELATIONS STYLE

Another school of office management, reflected in workplace and office-equipment design, displaced the "scientific" style after World War II.

Most writers trace this school back to a series of experiments undertaken in 1927 by researchers from the Harvard Fatigue Laboratory, working with six women who were assembling telegraph relays at the Hawthorne Works of the Western Electric Company. The researchers experimented with breaks, schedules, and lighting, and found that output rose with each new experiment. Eventually they reintroduced the original working schedule, and found to their puzzlement that productivity rose again, higher than at any other time. The researchers concluded that workers responded with increased productivity not to working conditions per se, but to being allowed to change those conditions, and to the perception that management was actingresponsive to their needs. These conclusions formed the basis of the "human relations" school, which became widespread in the 1950s, and dominates the business world today.

Forty argues that this style of management, and the more democratic, less factory-like office environment it fostered, would not have caught on except that post-war unemployment was low, and the country's growing service industries had to either lure workers with higher pay (they did not: factory work paid more on...
average than office work) or make the office seem like a cleaner, more interesting, more relaxed place.

Many plans for the office developed. These included the informality (still tied to work flow) advocated by proponents of the Bürolandschaft movement, in which workers and manager, were arranged like objects in a rural landscape, as well as the relatively more hierarchical "modified-open" plan, which mixed closed offices with open areas. Companies with different structures and corporate cultures could choose from a range of options.

To support such arrangements, materials such as panel-mounted office-systems furniture were developed. These permitted companies to reintroduce visual and sometimes aural privacy to the office while taking advantage of tax laws favoring movable equipment over stationary building assets. It enabled them also to integrate new generations of computers and the wiring and lighting they demanded, as well as to project a sophisticated, progressive atmosphere.

A good example of the state of the art for the style is the headquarters for the GTE telephone operations group in Irving, programmed and designed by HMBH Architects, Dallas.

The concrete-and-glass office building, comprising 195,000 square feet in a campus once owned by Braniff Airlines, is not lavish. But it has pleasant public spaces and good views of park-like grounds around a central lake. The interiors, using modular systems furniture and a floor raised to allow easy access to cables, are flexible enough to permit constant reorganization—the architects estimate that an average worker changes offices every six months. Filtered daylight throughout the open-planned spaces and lighting levels lower than those found in most offices fit the computer-intensive work style. And a 14-member committee, representing all the user groups in the facility, helped select and test the furnishings and finishes for six weeks before they were installed. Says Don
Collier of HMBH, chief designer of the project, “The way GTE staffed it made for a textbook example of how to do a headquarters project—it was trouble-free.”

**THE OFFICE REDIVIVUS**

Others suggest that the enlightened “human-relations” approach exemplified by HMBH’s work for GTE will not be enough to affect productivity significantly.

Michael Tatum of HOK says that architects and corporations “have the technical tools they need” for good office design. “We don’t need massive changes in hardware. We need massive changes in attitudes. Some clients are seeing the connection between worker satisfaction and productivity, but too many are still concerned only with build-out and furnishing costs. Until that changes, and until designers and architects are willing to really listen to people’s needs, instead of designing what they think people need, we’re going to have the same problems. Most design-oriented firms have little genuine empathy for the business client—they’re too style driven. That has to change.”

Duncan Sutherland and Steven Parshall of CRSS suggest that it will take a total rethinking of the nature of office work before companies can organize to produce (and architects can design to support) real productivity gains. He and his colleagues propose a radical extension of the human-relations style that may potentially do away with centralized office buildings, standardized work schedules, and other things that make up the matrix of today’s corporate life.

*Officing: Bringing Amenity and Intelligence to Knowledge Work*, a bilingual book recently published jointly by CRSS and Matsushita Electric Works of Japan, examines these issues.

The key resource of companies is information—or, more properly, knowledge, information connected into useful patterns by people—the authors argue. The industrial model suggests that reports and graphs, even computer files, the means for storing and transmitting information, can be used to measure the productive use of knowledge. But such a model demonstrably doesn’t work, Sutherland and Parshall assert: tangible products are merely “symbol buckets” for the real work going on, and thus can’t be used for reliable measurement. Until we see office work differently, they say, productivity can’t be improved.

“People and the knowledge they use to guide their decisions are the chief assets of business,” says Parshall. “It follows from this that the mission of business is to support the effort and creativity of its people. To do this, the whole idea of offices and working hours and everything we take for granted has to be rethought, because so much of it actually stands in the way of the open communication that is needed to improve productivity.”

The office of the future that will support knowledge work, Parshall says, may not be contained in an office building. Instead, it may be a “virtual office”—consisting of the ability to plug in to the communications and processing equipment of the company while at home or while traveling, wherever the worker is.

Historians say the first modern office building was the Uffizi, the 16th-century Medici palazzo that melded the ducal administration into a symbol of civic authority; this compelling artifact may dematerialize, becoming something like the plug-in service nexus predicted by the visionary 1960s British architects at Archigram.

Companies may continue to build specialized facilities for training, meetings, and other functions that bolster group cohesiveness and loyalty. Certainly, as a means of supporting the individuality and thus the productivity of workers, the line between home and office will be blurred, so that shared office facilities will include places where workers can “recharge,” and homes will include more space for work.

This vision of the future, with its not-quite-within-reach utopianism, provides the way out that American business is eager to find, judging by today’s slice-of-death advertising. At the same time, it suggests a return to the life enjoyed by craftspeople in preindustrial society, with workers controlling the type and flow of work as well as their working environment.

But utopian visions have a way of biting their inventors. Corporations still are driven by the need to maximize profits, and all the talk of increasing worker self-actualization is based on corporate needs, not altruism. So consider this alternative: some companies could become like those predicted by CRSS researchers, but others, under stress, could use the move to flexible working hours and “homework” not to free workers but to extend corporate discipline. To extrapolate from Adrian Forty’s view of early-20th-century offices, the home could become yet another place organized by management in ways that infringe on its privacy, with the employer buying not just part of the worker’s day but all of it, demanding the right to regulate all the worker’s activities.

The challenge to American business lies in making the individuality of workers a driving force that matches economic competition in importance.
FRACTURED PLANES OF LIGHT
SHAPE A SINGULAR AUSTIN OFFICE

By Joel Warren Barna
Photography by Carol Cohen Burton

Austin architect James Mayeux has created a one-of-a-kind work space for the two-year-old, six-member advertising and design firm Whittington, Meis & Narro. The office occupies 1,200 square feet of lease space down the hall from the architect's own office in a warehouse building that Mayeux bought with partners and rehabilitated in 1985.

Mayeux punched bright, gridded openings into the brown brick walls of the 70-year-old warehouse and added aggressively visible pyramidal skylights (these led architects at Black Atkinson & Vemooy, who work across the street, to dub the project "One Dorito Center"). Mayeux inserted a second floor into the building shell, bisecting the large windows to the rear of the building, and added a hallway that climbs and angles from one corner of the north side to the center of the south wall, splitting the second-floor spaces in two.

The partners at Whittington, Meis & Narro chose Mayeux's building for its central location, they say, and because it would amplify the more personalized, less corporate identity they wanted to project. According to Mayeux, the program required a "relaxing, creative atmosphere, with 'anti-cubicle, barrier-free' space so that collaboration and brainstorming could occur freely in any part." All employees needed discrete work areas, but wanted to be able to see each other and visitors.

Mayeux, responding to these demands and working with the spaces formed by the building...
layout, created a space that, depending on one's attitude, is either a necessary antidote to the spurious universality of high-tech office space, or slightly unnerving, or both.

The suite is divided by an entry/reception area into a business zone and a production zone. The business offices have gypsum-board partitions. They are carpeted, as is the reception area. The production area has vinyl tile floors and several windows, including one at baseboard level. It is separated from the reception area by a curved gypsum-board colonnade.

But Mayeux has given this simple diagram a unique quality. Not only is there almost no enclosure in the office space—the photographic darkroom and three closets are the only "rooms"—but the emphasis on openness seems to have eroded the building everywhere one looks. Structural elements, oddly, seem both suspended and weightless. Corners are resolutely indeterminate.

Walls, beams, roof-planes, and air-conditioning ducts approach each other, then angle away as if they had different places to go. Light spills in from the sides, from above, even from below, as if making up new rules.

"I wanted the feeling of light leaking in and space leaking out," says Mayeux, adding, "the perception was that psychologically unbounded space and natural light would serve the clients' desire that their work space be a natural expression of themselves."

Mayeux's space is not for everyone, but it wasn't meant to be. Its chief virtue is that as a solution it is solely architectural, an idiosyncratic reference point in a homogenizing world.

**PROJECT:** Offices for Whittington, Meis & Narro
**ARCHITECT:** James Mayeux, Architect, AIA
**CLIENT:** Whittington, Meis & Narro
**CONSTRUCTION MANAGER:** James Mayeux
Kohn Pedersen Fox has existed as a firm for barely 10 years, yet has produced a remarkable number of significant buildings. Although KPF emerged seemingly full-grown from roots in the John Carl Warneke office, it would be unreasonable to expect an in-depth critical study so soon. This new monograph, with an introduction by Paul Goldberger of The New York Times, is straightforwardly a presentation of built and unbuilt work to date.

KPF's singular distinction, according to Goldberger, is that the firm is doing "commercial" projects but is driven by "aesthetic innovation." Goldberger compares the firm to that of Philip Johnson in the 1970s for reestablishing "the connection between aesthetic innovation and the commercial mainstream," that had been lost in the '50s and '60s. KPF, Goldberger says, ranks with the few firms "that produce commercial work of consistent seriousness of intention."

The historicism of KPF begins not with a stylistic preconception, or even a building program, but with the context of a project's built surroundings. Until 1982, the firm's design philosophy of contextualism used a collage technique to combine forms, materials, and even styles, which tied a building to its given site. The collision/juxtaposition of glass curtain wall with sculpted masonry one commonly encountered in the firm's work has given way in recent projects to more classically composed and stylistically unified buildings—towers composed like classical columns, as proposed by Louis Sullivan.

Both design approaches, however, are intended to reach the same goal of establishing continuity with the surrounding urban context. As noted in the 1985 RIBA catalog to the London exhibition of KPF work, "the values underlying this approach are those of traditional European urbanism, where a strong wall of buildings along a street or square helps to shape a public life."

This urbanistic concept—making a public place with pedestrian activity—is also applied to suburban buildings. Interior volumes and spaces in such projects are composed into arcades and atriums, reflecting a concern for human contact and interaction. The complexity of contextual responses, external and internal, goes beyond simply responding to stimuli: the facades and interiors are intended to enhance their environments.

In spite of the diverse contexts where KPF's work has been built and the personal input of three design partners and several other senior designers, some formal and stylistic traits recur:

- The KPF window, a three-part composition with a large central pane set flush to the building skin and narrow side lights recessed back to the interior wall surface. This is reminiscent of the shallow bay windows Charles Rennie Mackintosh set into the thick south walls of the Glasgow School of Art.
- A masonry skin with combinations of small punched openings and vertical slot openings, composed into woven patterns that frequently play ambiguously with tower scale and shaft proportions.
- Classical 1920s/30s three-part tower composition, which relates to the building at several scales: pedestrian (base), street wall (base and shaft), and skyline (capital).
- Ground-level planning that emphasizes pedestrian activity and brings it into the building in major lobby spaces and through the building in galleries or Larkin Building-like atriums.

There are a number of flaws in the monograph's overall character, however. The photographs, especially those in black and white, are of uneven character. The texts describing the selected works are stilted and jargon-loaded, no match for the corresponding texts in the 1985 RIBA catalogue. While interesting in bringing out some of KPF's conceptual concerns and motivations, the interview format does not clarify the office structure and working relationships of the partners. Finally, the "Comprehensive List of Works" section is often unclear as to whether projects were built.

Drawings, on the other hand, are beautifully printed and include site plans, elevations, and enough level plans to describe the projects fully.

In The Tall Building Artistically Considered, Ada Louise Huxtable writes that "the question of how to design the tall building has never really been resolved; it continues to plague, disconcert, and confound theorists and practitioners alike."

While in some respects the work of Kohn Pedersen Fox returns to Beaux Arts ideals as a conceptual springboard, the flexibility of their contextual design philosophy has produced a number of buildings that should endure as influential examples of how to do a tall building at the same time that they illuminate the history of architecture in our era.

Reviewed by Gerald Moorhead

Kohn Pederson Fox's approach recalls traditional European urbanism—a strong wall of buildings along a street or square reinforces public life.
WHITE BY DESIGN.

HUGH M. CUNNINGHAM INC.
MANUFACTURERS REPRESENTATIVE
4309 NORTH BELTWOOD PARKWAY
DALLAS, TEXAS 75244-3294
(214) 661-0222
HOUSTON • SAN ANTONIO
Circle 45 on Reader Inquiry Card
A CAL-SHAKE ROOF WON'T COME BACK TO HAUNT YOU.

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

Cal-Shake is made to withstand the most severe Texas weather conditions. Fireproof Cal-Shake is Class “A” fire rated and lightweight, making it ideal for your remodeling project. Cal-Shake is guaranteed to brighten your spirits.

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

CAL-SHAKE
(214) 270-7763
(800) 826-0072
P.O. Box 2048, Irwindale, CA 91706
Circle 46 on Reader Inquiry Card

---

WEEDEND CHARETTE LAUNCHES PLANNING FOR “ARTISTS’ SQUARE”

With construction substantially underway on the Meyerson Symphony Center in the Dallas Arts District, city officials and civic leaders have turned their attention to property immediately adjacent to the new concert hall. The five-acre site, known as the “Borden Tract,” currently accommodates a temporary Arts District theater, designed by A.R. Architects + Planners, Dallas, for the Dallas Theater Center. Eventually, the site will have a permanent Theater Center building, in addition to new opera and ballet halls. In the meantime, plans are being formulated for an interim use of the site as an “Artists’ Square.”

In May, the City of Dallas and several Arts District groups sponsored a two-day workshop to initiate planning efforts for the project. The design team, consisting of Stuart Dawson of Sasaki Associates and four visual and performing artists from Dallas, discussed with workshop participants the need for a major public space in the city to accommodate arts activities permanently. Interestingly, as much emphasis was placed on the proper programming of these activities as on the actual form of the park. Participants agreed unanimously, however, that what Artists’ Square should not become: specifically, Dallas City Hall Plaza, which despite its virtues is an uncomfortable and awkward civic space.

The design team’s task now is to translate the considerable wealth of ideas presented during the event into a design that will be reviewed at a second workshop later this summer. Artists’ Square is scheduled to be in place by July 1989, in time for the opening of the Symphony Hall. The project promises to be a vivid and exciting addition to the Arts District, but its presence raises an important question: if it is successful as a public square for Dallas artists, how will it be displaced by the completion of permanent facilities for theater, opera, and ballet?

— Willis Winters

Willis Winters, a frequent contributor to Texas Architect, is an associate with F&S Partners, Inc., Dallas.
Students Design and Build International Festival Gateways

As part of the Houston International Festival's expanded education program, students from Rice University, the University of Houston, and Prairie View A&M University designed and built gateways for the Apr. 7-17 celebration. The Houston Post and Tenneco sponsored the program, which created visual focal points for Festival activities at Sam Houston Park, International Plaza, and Tranquility Park.

The students participated in an in-house review process to arrive at a gateway scheme for each location. Organizers provided only minimal guidelines, ensuring only public safety and site enhancement, to allow the students freedom in designing the gateways.

Prairie View A&M students designed gateways for the two entrances to International Plaza, one a "gable scheme" using basic house framing with exposed structure and the other a "box-truss scheme" designed as a latticed garden wall to lead visitors in from the street or to act as a meeting point.

The UH gateway was a visual statement condemning the destruction of the city's historic fabric, illustrated by a stylized crane and scaffolding whose wrecking ball was implanted in a recreated facade modeled after the recently demolished Warren's Inn on Market Square.

Of their symbolic scheme, Rice's designers said, "The scaffolding structures the relationship between objects within the scaffolding and those objects beyond. The objects which inhabit the scaffolding are a gate house, its attendant gatekeeper and the representation of roof and sky."

-- RDT

The Overwhelming Choice
In Floor Underlayments.

We've poured our underlayments in apartments, condominiums, office complexes, single-family homes and shopping malls. More than 600 million square feet of Gyp-Crete* and Gyp-Crete 2000® have been installed nationwide. For new construction or renovation, they're the overwhelming choice in floor underlayments.

Here's why:
• Sound and fire control
• Accepts virtually all finished floor goods
• Pour over wood or concrete subfloors
• No shrinkage cracks
• Pour to depths of 3/8 to 3"
• Accepts foot traffic within 90 minutes
• Fast, efficient installation
• Leveling capabilities

Brekke Distributors
P.O. Box 59465  Dallas, Texas 75229  214-484-8948

Texas Architect July August 1988  Circle 47 on Reader Inquiry Card
PRAN ON DESIGN

Pran is a company whose existence grew from the need to provide clients with the technical knowledge of how to accomplish their communications needs while maintaining decorum, design enthusiasm and maximum functionality at a level consistent with their available budget.

Our background is the amalgamation of 12 years of successful projects in design for corporate boardrooms, training facilities, marketing centers and special purpose areas. We often work with architects on controls, acoustics, audio visual system design, motorized walls and curtains and user-requested custom gadgets. Our knowledge of construction processes saves time and ultimately the owner's money. We also have a vast knowledge of available products and sophisticated techniques. In short, we know how to compliment function with form. Contact us to see if we can complement you in designing to your client's need.

PRAN, INC
The Communications People
790 Rock Street
New Braunfels, Texas 78130
512 625-2376 800 292-1165

PRAN ON CONTRACTING

Sophisticated boardrooms, training facilities and special purpose areas throughout Texas have audio visual and teleconferencing systems installed by Pran. On-time and on-budget. Our installation quality and techniques withstand the test of time with thousands of hours of dependable operation. We start with the highest quality components assembled with concern for detail. With custom manufactured products we go to the extreme to ensure zero defects. Custom designing and building offers the opportunity to make it flawless. We know the best components cost more; we also know the cost of system failure during important presentations. Our focus is toward longevity, expandability and ease of use. Because we can customize, clients never have to settle for just an off-the-shelf arrangement. What the client wants is what the client gets. Contact us to see if what your client wants is what we offer.

PRAN, INC
The Communications People
790 Rock Street
New Braunfels, Texas 78130
512 625-2376 800 292-1165

Circle 48 on Reader Inquiry Card
Eight "simple," "direct," and "controlled" projects were winners among 96 entries in the Dallas Chapter/AIA's annual design-awards program. The jurors chose one Honor Award, "for work of the very best quality in all aspects of design," and seven Citation Awards, for "commendable design intent or idea, although perhaps not executed to the consistent quality level exhibited by the project receiving the Honor Award." No Merit Awards were chosen.

Honor Award
- Springbrook Townhouses, Dallas, by Lionel Morrison/OMNIPLAN.

Citation Awards
- AT&T Customer Technology Center, Dallas, by RTKL Associates, Inc.
- Bachman Boathouse, Dallas, by Mullen Architects.
- Sesler Residence, Dallas, by Cunningham Architects.
- U.S. Post Office, White Rock Station, Dallas, by Milton Powell & Partners.
- Williams Residence, Wise County, by Frank Welch and Associates, Inc.
- Zale Corporation Headquarters, Irving, by Hellmuth, Obata & Kassabaum, Inc.

Jurors selected only one Honor Award: Springbrook Townhouses, LEFT, by Lionel Morrison/OMNIPLAN. Two of the seven Citation Award winners were the Bachman Boathouse, BELOW LEFT, by Mullen Architects, and the White Rock Station Post Office, BELOW, by Milton Powell & Partners.

Jurors for the awards program were Lawrence Booth, FAIA, principal of Booth/Hansen and Associates, Ltd., Chicago; Craig Taylor, associate partner of Skidmore, Owings & Merrill, Houston; and Michael Palladino, partner in Richard Meier and Partners, Los Angeles.

— RDT
In the recent Ideas Competition for the New York Waterfront, "Studio 411," a UT Arlington student group, won second prize in a field that included 500 submissions from architects and landscape architects worldwide.

Sponsored by the Municipal Art Society of New York and funded by the National Endowment for the Arts, the competition sought to "generate ideas for the form, activities, and character of the four-mile Hudson River waterfront between Battery Park and 44th Street."


Professor J. P. Maruszczak led the student group composed of Jorge Basora, Bayazed Billah, Lance Fuller, John Hampton, Cynthia Hart, Michael Jensen, Thomas Kalert, Drew Miner, Evelyn Montgomery, Mathew Nugent, Mark Robertson, Tara Scruggs, Patrick Smith, Amy Squires, and Steven Wilson.

-- RDT
Architectural Toys Auctioned, Mitchell Honored at RDA Gala

The auction of 55 architectural toys netted over $25,000 for the Rice Design Alliance (RDA) at "Step Back in Time," the RDA's 15th anniversary benefit, held May 21.

The gala also honored outgoing Rice University School of Architecture Dean O. Jack Mitchell, FAIA. In the spirit of the event, Mitchell received an "O. Jack-in-the-box," a basswood model of the School of Architecture that, when cranked, releases a photograph of Mitchell.

A crowd of 450 was on hand to bid on the toys, designed by Houston architects and others, with minimum bids up to $1,200.

—RDT


Texas Architect July August 1988
IS YOUR WORKERS' COMPENSATION INSURANCE CARRIER PLAYING WITH A FULL DECK?

If you haven’t been dealt a full hand by your current workers’ compensation insurance carrier, throw it in and let AA&C deal you a winning hand!

For more information about the TSA Group Workers Compensation Plan’s good deal, please contact Jennifer Miller at:

ASSOCIATION ADMINISTRATORS & CONSULTANTS, INC.
TSA Group Insurance Service Organization
18000 MacArthur Boulevard, Suite 500
Irvine, California 92715
1-800-854-0491 Toll Free

HOUSTON

SPACE STATION CONTROL CENTER WILL SUPPORT NASA’S NEW ERA

With a construction budget of $16 million, the Space Station Control Center (SSCC) addition to the Johnson Space Center in Houston, currently being designed by HMBH Architects, Dallas, is a major project by any measure. But the building’s cost pales when compared to the $200 million of electronic equipment it will house.

By 1994 the equipment will support NASA’s planned space station. “It will be a 24-hour-a-day operation,” says HMBH project manager Edward Sweetnam. The SSCC’s Operations Control Center, like the original Mission Control next door, will contain flight and operations support, but the “amphitheater” so familiar from space launches of the past will be replaced by a single-level control room divided into modular console groupings instead of massive banks, and will be observed by directors and visitors from a more reserved mezzanine above.

Continuous functioning of computer and mechanical equipment is a central concern in the building’s design, says Sweetnam. Accordingly, the building’s main power system, supplied by Houston Lighting & Power, will be backed up by two levels of reserve power to ensure no loss of contact with the space station.

The five-story, 107,000-square-foot SSCC adjoins the existing three-story Mission Control in the space-center complex called Building 30. Built using a steel-and-concrete composite structure, the SSCC will be finished with the same precast exposed aggregate facing panels used on the 1960s original. Construction should begin in early 1989 and end in late 1990, followed by a three- to four-year NASA move in and system activation.

The first launch of space-station components is scheduled for mid-1994.

— RDT
**Dallas**

ONE-DAY DRIVE FIXES NINE HOMES FOR LOW-INCOME ELDERLY

A group of 350 volunteers from the architecture and construction industry converged on a nine-block area of the South Central neighborhood on Apr. 23, rehabilitating the homes of elderly, low-income residents.

The project, says Trammell Crow Company's Robert P. Walker, one of its coordinators, was simple but effective. Each of nine groups—one group each from JPJ Architects, Dallas Chapter/AIA, Dallas-Fort Worth Returned Peace Corps Volunteers, Constructors, Inc., Dal-Mac Construction, Milliken Co., and Medical City Dallas, and two groups from the Trammell Crow Company—worked the entire day to rehabilitate a house, repairing roofs and fences, painting, doing yard work, and even, in one case, completely reinstalling siding. In addition, landscaping was added to each house after all other necessary work was done.

"[The rehabilitation] was a great impact on that one neighborhood," says Walker. "Some [homeowners] were bedridden. All had the need."

The various houses were videotaped throughout the day for a 10-minute promotional tape to be presented to other groups. The effort, organizers hope, will become an annual event that will be adopted by other groups around the state, including the 17 TSA chapters.

— RDT

**Houston**

CONWAY ADDRESSES THE GROWTH OF CRAFT IN CORPORATE INTERIORS

The corporate boardroom, long the elitist sanctuary of sleek, modern elegance or plush traditional clubbiness, is softening to the touch of the artist's hand, a change reflected in projects by Kohn Pedersen Fox Conway (KPFC), which uses carved, inlaid, unique pieces.

At the University of Houston and Innova on Apr. 11, Patricia Conway discussed the firm's use of craftsmen, emphasizing the distinction between the common craftsmanship of a well-laid brick wall and the artistry of a handmade table or chair. Until recently, custom objects in commercial interiors have been used more as art than as practical objects. KPFC, in contrast, works to integrate interior materials with architecture in a "unification of space through craft."

The precedents for this Gesamtkunstwerk include Hoffmann, Wright, Mackintosh, Horta, and Greene and Greene, whose architecture, interior spaces, and furniture are inextricably joined. The American arts-and-crafts movement, embodied in Stanford White's collaboration with Associated Artists, inspired KPFC.

It was in an apartment interior in New York for Muppets puppeteer Jim Henson that the firm first used unique pieces of furniture—Henson's varied collection as well as commissioned items—in a coordinated environment. The board room of Home Box Office, New York, incorporates a custom table (built for less than a comparable "contract" table) by repeating molding profiles, patterns, and joinery details. In the Pandick, Inc., printing company's board room in New York, a regular system of proportions and geometric detailing unifies KPFC-designed woodwork and cabinetry with custom-crafted pieces of furniture.

KPFC's designers lead the team and establish basic concepts, and yet craftsmen are allowed not merely to produce furniture to architects' drawings, but to develop their own expressions within unifying guidelines. A current interior project for a 50,000-square-foot residence will use more than two dozen craftsmen for furniture, metalwork, stained glass, and ceramic tile.

— GM
IN PROGRESS

PROJECT: The McCurdy Lodge

Often the best architecture begins with an engaged client who asks an architect to design a structure that may already be well-defined in the client’s mind, if not on paper. This was the case with Frank Lloyd Wright’s Fallingwater, the 1936 residence for Edgar Kaufmann, cantilevered over Bear Run, Pa. Kaufmann, beyond indulging Wright, showed him the boulder (a prominent feature in the eventual main room) at his favorite spot on the creek and asked that he be able to sense the running water in his house.

The relationship between outdoorsman and environmentalist Robert McCurdy and architect Carrie Glassman Shoemake grew similarly in the design of a residence nearing completion on the Colorado River southeast of Austin. While the McCurdy Lodge is not Fallingwater, it does embody its owner’s vision first and its architect’s design statement, properly, second.

McCurdy, an avid fly-fisherman, decided on his 50-acre lodge site several years ago after combing the area for the ideal spot. He often fished there and over time decided where his house should be sited. He even sketched his idea of how the building might look.

He laid his plans before Shoemake, describing sensory images he hoped she could incorporate into the design: a house of distinct parts, square on top of square; the sound of rain falling on tin roofs like those of the Fort Worth dairy farm where he grew up; the integrity of simple handmade-ness; and the use of New Mexico adobe.

Shoemake assembled his voluminous groundwork, combining it with the turn-of-the-century work of Greene and Greene, an outlook modeled on the widow’s walks of McCurdy Lodge, view of model from southeast, TOP: east elevation, UPPER: first-floor plan, BELOW: and section looking north, BOTTOM.
SCHOOLS


Members of the school were also winners in the Dallas "Pyramid Award of Excellence" residential design competition, which drew 200 entries from several states. Associate Professor Bill Boswell received "Best Floor Plan" and graduate students Margaret Garcia and Craig King won "Best Student Entry."

The University of Minnesota and the University of Washington will hold "Exploration into Sacred Architecture: 2000 Years of Living/Ancient American Indian Culture," a summer studio and seminar in Santa Fe, N. Mex. 505/988-5309.

EVENTS

July 26: Deadline to enter the American Institute of Steel Construction's 1988 Prize Bridge Awards for "outstanding bridge designs utilizing structural steel aesthetically, imaginatively, and effectively." 312/670-3400.

Sept. 15: Deadline to enter the National Lighting Bureau's National Lighting Awards Program for projects that "demonstrate that good electric illumination can help pay for itself by generating bottom-line benefits." 202/457-8437.

Sept. 30: Deadline to enter REMODELING magazine's Renaissance '88 awards program for "excellence in design and construction of residential and nonresidential remodeling and renovation projects." 202/383-8360.

Oct. 31: Deadline to enter Boston Visions, "a national design competition to create new visions of Boston's future," sponsored by the Boston Society of Architects. Winners share $50,000 in prizes. 617/267-5175.

Nantucket, a collection of furniture built by four hill-country craftsmen, and wooden floors and walls recycled from UT Austin's Gregory Gym, the Dallas Opera House, and an 1880s brewery in Quincy, Ill.

The result is a rambling 4,000-square-foot composition with two contrasting primary parts: the massive stucco main house, composed of three levels with square plans, each proportionately smaller than the level below; and the light wood-frame porch, with redwood flooring and siding under laminated beams in a rendition of vernacular fishing cottages. Metal roofing with large overhangs makes a cascading aural event of rainfall, and provides protection from harsh summers with help from river-cooled easterly breezes. A fly-tying room, a "mud room," and a fireplace large enough for cooking exemplify the lodge's highly personal fit.

And Shoemake's sensitivity to McCurdy's idea of what his house should be is the key to this comfortable, controlled rustic haven.

— RDT

How many ways to use cedar shakes?
How many trees in a forest?

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

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

Red Cedar Shingle & Handsplit Shake Bureau
The recognized authority
Suite 275, 515-116th Ave NE, Bellevue, WA 98004

News to know, credit to earn
Circle 55 on Reader Inquiry Card

Circle 41 on Reader Inquiry Card
La Cupola is the latest piece of "microarchitecture" from Alessi of Crusinallo, Italy. Designed by Aldo Rossi, the espresso coffee maker is one of Alessi’s household objects by famous designers.

Circle 22 on the reader inquiry card.

Tarkett Inc.’s Stylglo line of vinyl floor tile achieves Faux Marble in gray, beige, and white base colors. Its Brite-Bond No-Wax Wearlayer provides stain and scuff resistance and easy care.

Circle 23 on the reader inquiry card.

The Hardwood Institute’s 44-page brochure, “Imagination Within,” shows innovative uses of hardwoods in home and commercial-building interior design. The brochure covers custom flooring, ceilings, wall paneling, millwork, staircases, and cabinetry, and provides the names of companies to contact.

Circle 24 on the reader inquiry card.

American China’s Designer Series features opalescent lavatories in 17 designs. The finish resembles mother-of-pearl, but fired metallic compounds make it very durable.

Circle 25 on the reader inquiry card.

Kohler’s Alterna transforms flowing water into an event to watch. Geometrica Champleve insets complete this sample from Kohler’s latest line of kitchen and bath products.

Circle 26 on the reader inquiry card.

Sterling Engineered Products gives designers creative freedom with its Pi- onite Strata II plastic-laminate series. New graphics, textures, and simulated stones can be specified in custom colors, with no minimum order.

Circle 27 on the reader inquiry card.

The Rizzi Collection, designed for Corry Hiebert by John J. Rizzi, includes this glass-top conference table, with a metal base available in many finishes.

Circle 28 on the reader inquiry card.


Circle 29 on the reader inquiry card.

The National Lighting Bureau’s publications directory lists 11 helpful lighting guides. Among the topics: VDT viewing problems, industrial lighting, energy savings, and system audits.

Circle 30 on the reader inquiry card.

The Rockettes Border comes from Schumacher’s “Radio City Music Hall Art Deco Collection,” featuring woven and printed fabrics, wallcoverings, and floorcoverings inspired by Donald Deskey’s designs from the 1930s.

Circle 31 on the reader inquiry card.

The American Plywood Association offers two helpful guides: the Research Literature Index lists research and laboratory reports from APA’s Research Center; the Product Guide: Grades & Specifications provides a full overview of architectural specifications for plywood products.

Circle 32 on the reader inquiry card.

Pinecrest’s new 97-page catalog presents examples of its designer-series and custom doors. In addition to the Prairie School Collection, other period collections are available in a variety of solid woods, glasses, and metals. Pinecrest can also build custom doors to architects’ drawings and specifications.

Circle 33 on the reader inquiry card.

Universe 3080/A column-cover system of formable aluminum-composite panels from Dunmon Corp. provides a mirrored-glass-like reflective finish without the breakage problems of real glass.

Circle 34 on the reader inquiry card.

KeyStone retaining-wall systems use high-strength concrete modules and interlocking fiberglass pins for economical retaining walls that resemble rusticated stone. Color, face pattern and angle, and module-size variations are available.

Circle 35 on the reader inquiry card.
ARCHITECT. The National Council of Architectural Registration Boards (NCARB) is looking for an Assistant Director of Examinations Development. Assists in the administration of the national architects registration examination program. Works closely with prominent architects across the country to produce the current national examinations and to research and develop future examinations. Minimum requirements: architectural registration, accredited B. Arch. or M. Arch. degree, and five years of progressive architectural experience. Strong architectural, management and communication skills are also required. Experience with computers is desirable. Position offers a complete benefit package and $35,000 to $40,000 salary. Some travel is required. Submit cover letter and resume in confidence to: Director of Administration, NCARB, 1735 New York Avenue, N.W., Suite 700, Washington, DC 20006.

**Project Manager**

California architecture firm seeks project manager, minimum five years experience. Licensing not required. Firm specializes in commercial work, banks, schools, etc. Good opportunity for growth. Send resume to HMR Architects, 2321 P Street, Sacramento, CA 95816, or call 916/444-5973.

### INDEX TO ADVERTISERS

- Association Administrators & Consultants, Inc. ................. 52
- Assurance Services, Inc. ........................................... 11
- John Benoist Photography .................................................. 49
- California Pools & Spas ...... Back Cover
- Cal-Shake ................................................................. 46
- Client Construction Management .......... 2
- Coleman & Jones ......................................................... 57
- Construction Cost Management ................. 54
- Dow Chemical ............. 19
- Elgin Butler Brick .......... 16
- Eljer Plumbingware ...... 12-13
- Featherlite Building Products Corp. .............. 14
- Gerard Tile Inc. ........ 50
- Great Southern Supply ........ 15
- Gypcrete/Brekeke ........ 47

### COMPANY LISTINGS

- Haworth ......................................................... 4-5
- Hugh Cunningham ............................................. 45
- Jewell Concrete Products .................. 58
- Masonry Institute of Texas .............. 20
- Microcad Systems ........................................... 54
- Miller Blueprint ................................. 55
- P ran, Inc. ......................................................... 48
- Red Cedar Shingle and Handsplit Shake Bureau .... 55
- Southwestern Bell .......................... 6
- Steelcase/Stow & Davis .................... Inside Front Cover
- TSA Convention ...... Inside Back Cover
- TSA Products Exhibition .......... 1
- Thoro System Products .................. 10-11

### THE COLEMAN PROFESSIONAL HOT WIRE FOAM CUTTING MACHINE

At last a hot wire designed for Architects by a model maker. Cut design time, improve presentations and make deadlines. All accessories stow with the base for easy transport. The unique continuous feed bobbin makes wire changes a snap.

- Additional features:
  - 16 inch x 24 inch table
  - 12 inch vertical cutting capacity
  - Full range variable thermostat and foot switch
  - Single-axis two-way adjustable arm up to 60°
  - Self squaring rip fence and mitre guide
  - Adjustable stanchion for wire setting precision
  - 100 ft. mm. chrome wire continuous feed bobbin
  - 6 sq. ft. of 3 inch thick insulation
  - $495.00

**COLEMAN & JONES**

7390 Ashcroft
Houston, Texas 77081
713-998-1533

### Moving?

Let us know 4-6 weeks in advance so you won’t miss any copies of Texas Architect. Please include a copy of the old label.

**Attach Label**

- New Address:
  - Name __________________________
  - Company _______________________
  - Address _________________________
  - City/State/Zip ____________________

- Mail To:
  - Texas Architect
  - 114 West Seventh, Suite 1400
  - Austin, Texas 78701
or a number of years, Billy Secord McCord, FAIA, had been acutely aware of the difficulties he faced in maintaining his image as the Texas celebrity architect. Educated at the finest architectural schools in the East, nurtured and polished in the New York office of a world-class firm, B.S. had chucked it all to return to Houston in the fabulous turn-around boom years of the '90s when oil jumped to $65 a barrel.

His office flourished and he became the only Celebrity Architect in Texas, wearing his celebrity as a grave responsibility, one of the few Texas architects not yet done in by lawsuits.

As it became an ever-increasing burden to creatively top oneself with ever more outlandish, eccentric, and grotesque design solutions that could be cheaply executed in half-inch gypsum board, B.S. moved into permanent designer's block. His creative juices refused to flow when he, too, became enveloped in the web of our litigious society.

His problem began in conceiving the "high-rise hole," a new design cliché that called for punching an opening plumb through the full depth of a new 76-story office building in Houston. Proclaiming the high rise the "design idea of the decade," every architectural magazine in the nation published his preliminary sketches. On a follow-up publicity roll, B.S. was interviewed and photographed for *Time*, *U.S. News*, and *Cosmopolitan*, to name a few. He was shown standing by his drafting table, wearing a visionary gaze and a black vicuna double-knit leisure suit with the sleeves pulled up to show a Korean Rolex on each wrist.

As is most often the case, acclaim was short-lived. One week after McCord's aesthetic masterpiece was completed, the wind shifted from the north to its normal prevailing southerly direction, and the building began to whistle. Not just a puny little barely audible whisper, but a great big, high-pitched, shrieking monster whistle that went on and on and on and on! SHREE-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E!

During a coastal blow the wall awakened people in Waco, and every dog in South Texas howled with pain. Even before the building was demolished by court-ordered gunfire from the restored Battleship Texas, the lawsuits began. Three million Houstonians filed a class-action suit claiming the incessant whistle violated their acoustical civil rights and rendered them temporarily insane. The SPCA filed a $200-million suit representing 50,000 dogs in South Texas with permanent ear damage. Texas A&M sued on behalf of Reveille, its mascot. Enjoined by the owner, the contractor, and the subcontractors, and abandoned by his liability-insurance carrier, McCord filed Chapter 14 (a double Chapter 7) and emerged penniless.

B.S. is often seen shuffling through the alleys of River Oaks these days, muttering, "Less is too much, especially if it whistles."

David Braden, FAIA, is a principal in the firm Dahl/Braden/PTM, Dallas.

For more information, refer to the attached postage-paid card at right.
Keystone, a retaining wall system that retains good looks, ease of installation and economy.

Keystone is a high-strength, high-density, molded concrete retaining wall system. It gives you a variety of face patterns, colors and sizes. Best of all its interlocking pin system makes installation easy so you can use unskilled labor. Send for your free literature and a free scale model of the Keystone System or call us at 1-800-233-8686.

Name ____________________________
Company _________________________
Address _____________________________

Respond now for free product information and a scale model.
How to choose the right swimming pool builder.

How can an architect choose just the right swimming pool builder for their project? We at California Pools and Spas would like to offer some advice. Listen carefully to how different pool builders answer these questions.

**What kinds of pools do you build?**

You may find many pool builders specialize in only small, residential pools. The opposite is true with California Pools and Spas. We design and build commercial pools for country clubs and hotels, as well as custom design residential pools and spas. We also design and build water features of all types. So, with our expertise in several areas, we can help with your project.

**How would you design a pool for me?**

Some pool builders give you quick and easy answers. Not us. California Pools and Spas will carefully evaluate and study your needs. Then, our staff will design your project using the most advanced technology available in pool hydraulics. We believe in beautifully-designed pools that are well constructed. That's why we've won so many design awards.

**Can you offer me a guarantee or a warranty?**

Look for a pool builder who backs their work. California Pools and Spas offer warranties, completion guarantees and performance bonds. Our goal is your satisfaction.

**What experience do you have building pools?**

California Pools and Spas has served the swimming pool industry for 35 years. Compare that to other pool builders. You'll find our reputation for high standards and award-winning designs has made us a leader. So, call today. We're the right swimming pool builder for your project.