

# TEXAS ARCHITECT



11 / 12  
New Transportation Centers  
1 9 9 9



U.S. \$4.00

# NOW THERE'S A CEILING PANEL THAT INSTALLS IN ANY DIRECTION.

Ceilings go up a lot quicker with RADAR™ CLIMAPLUS™ panels. Their unique non-directional design allows them to be rotated 360 degrees for maximum efficiency. Plus – get a 15-year warranty on the panels and a lifetime warranty on the grid when you install with DONN® Suspension Systems. For more information, call 1-800-USG-4YOU or visit our website: [www.usg.com](http://www.usg.com)

radar™  
CLIMAPLUS™



CEILING  
SYSTEMS



experience...

reliability...

**support...**

trust...

accuracy...

**When you need us...**

Personal support...a thing of the past? Not at Southern Building Code Congress International.

Call our toll-free number, and a **real person** will answer the phone. When you have questions about the International Codes, we'll answer them for you. Our toll free numbers and code interpretation support are available to all members.

For a professional membership fee of only \$50, you'll get:

One free copy of the International code of your choice, plus discounts on all other purchases.

Electronic access. You can access our web page at <http://www.sbcci.org>.

As a professional member of SBCCI, you'll get personal attention...the support you need, when you need it.

SBCCI

900 Montclair Road  
Birmingham, AL 35213

Toll-Free Order  
# 1 877 4 ICODES

Fax: 205-591-0775

E-mail:

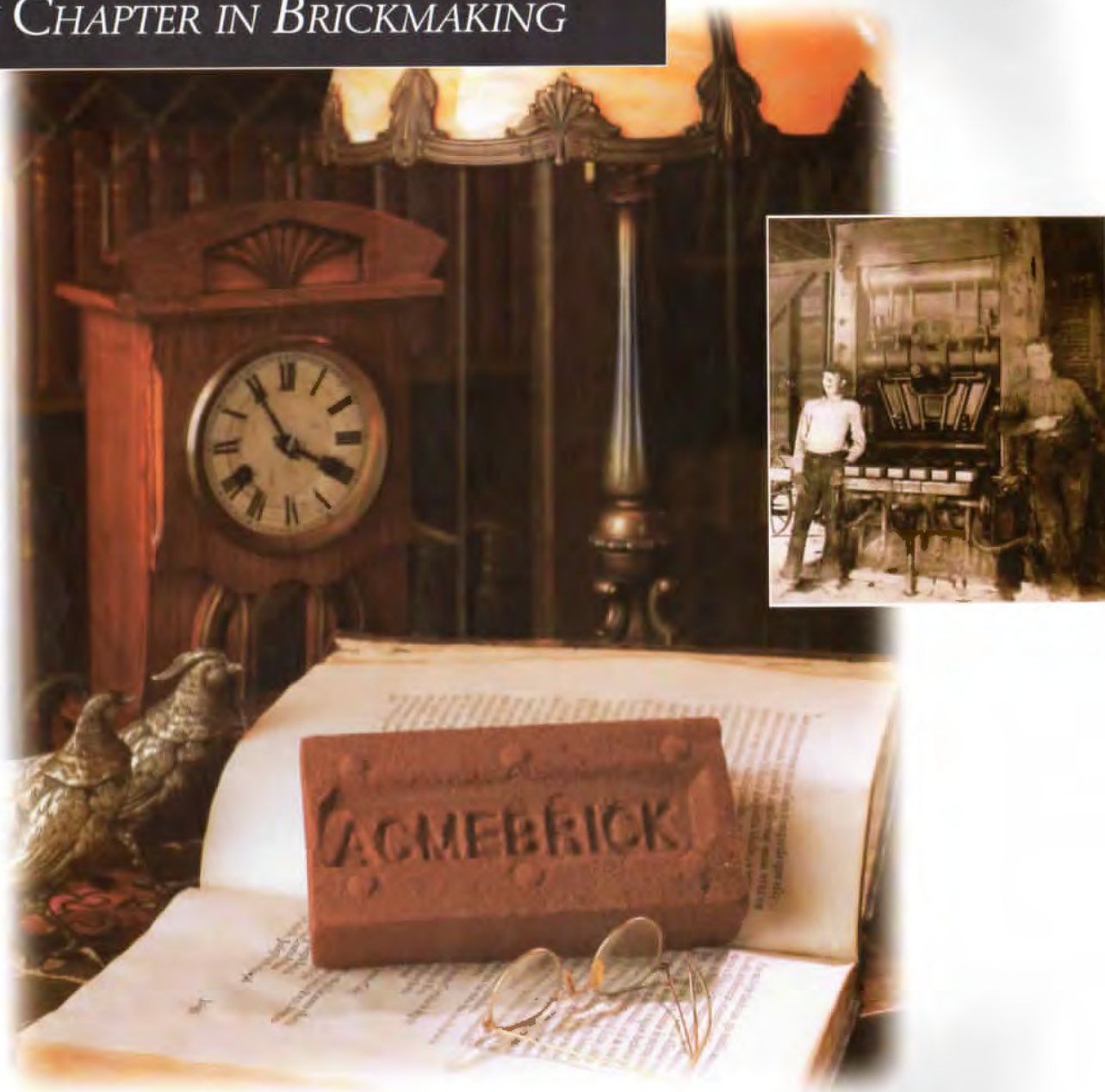
[members@sbcci.org](mailto:members@sbcci.org)

TTY: 205-599-9742



SBCCI

## "ACME HANDMADES" OPENING A NEW CHAPTER IN BRICKMAKING



In 1891, Acme separated clay from top soil by hand and then pressed this clay into molds. Brick were then stacked by hand in kilns. After firing, the most beautiful brick were hand selected for the most discriminating customers. In this chapter of our history brick were truly "handmade".

"Acme Handmades" will open a new chapter in brickmaking at the dawn of the new millennium. Our new molded brick plant in Elgin, Texas is the first of its type west of the Mississippi. This plant

represents Acme's largest single investment in support of our customers. "Acme Handmades" will enable us to offer architects the broadest variety of quality brick in our 108 year history. Please contact your Acme sales representative for more information on "Acme Handmades".



# TEXAS ARCHITECT



**On the cover:** Aerial view of the marketplace in the concourse of the Austin-Bergstrom International Airport; photograph by John Linden.

**Above:** Bird's eye view of Addison Circle in Addison; illustration by RTKL/John Yancey.

## NEW TRANSPORTATION CENTERS

- |   |    |
|---|----|
| <b>Turn of the Century</b><br><i>Susan Williamson</i><br>Barbara Jordan Passenger Terminal, Austin                    | 34 |
| <b>Gates of the City</b><br><i>Lawrence Connolly</i><br>Terminal Building, Midland International Airport, Midland     | 38 |
| <b>River Station</b><br><i>Lisa Germany</i><br>Riverwalk Streetcar Station, San Antonio                               | 42 |
| <b>Discovering the Street</b><br><i>Willis Winters</i><br>Addison Circle, Addison                                     | 44 |
| <b>Collaboration by Design</b><br><i>How a team of architects built the last major U.S. airport of the millennium</i> | 46 |

## D E P A R T M E N T S

- |  |    |
|--|----|
| <b>Editor's Note</b>   | 5  |
| <b>News</b>  | 12 |
| <b>Vignette</b><br>Sustainable Design  | 25 |
| <b>Interiors Focus</b><br>Terrazzo   | 28 |
| <b>Special Section with Industry News</b><br>Products for Sustainable Design | 50 |
| <b>Survey</b>  | 56 |
| <b>Marketplace</b>   | 60 |
| <b>Back Page</b>   | 64 |

[www.teleport.com/~aiatrust](http://www.teleport.com/~aiatrust)

*Insurance and Financial Programs  
for AIA Members*

*Health  
Insurance*

*Disability*

*Life  
Insurance*

*Retirement  
Program*



*Business  
Insurance*

*Automobile  
Insurance*

*LegalLine  
Insurance*

*Continuing  
Education*

*Small Firm Professional Liability*

## What Are Architects Saying About Today's AIA Trust?\*

96% say the AIA Trust is a valuable membership benefit.

94% of those most familiar with the Trust say the Trust's programs are a reason to belong to AIA.

3/4 of the participants in today's AIA Trust would recommend the program.

# AIA Trust

Plan information is available 24 hours a day, toll-free at

**1-800-255-8215**

Visit e-Architect on [www.aiaonline.com](http://www.aiaonline.com)

Select Member Services

\*AIA Trust Product Evaluation Study Wiese Research Associates 1998

November/December 1999 Volume 49, Number 6

*Texas Architect* (ISSN: 0040-4179) is published seven times per year (bimonthly and in April) by the Texas Society of Architects (TSA), 816 Congress Ave., Suite 970, Austin, Texas 78701, www.texasarchitect.org. TSA is the official Texas state organization of the American Institute of Architects (AIA). Copyright 1999 by the Texas Society of Architects.

David Lancaster Executive Vice President

Canan Yetmen Publisher

John Davidson Editor

Tamara Gill Managing Editor

Laura Dee Circulation Manager

Amy LaGrone Intern

Carolyn Baker 512/449-7012 Advertising Representative

## TSA Publications Committee

W. Mark Gunderson, AIA, Fort Worth (chair); Danny Boultinghouse, AIA, McAllen; Rob Clark, AIA, Beaumont; Lawrence Connolly, AIA, Midland; Elizabeth Danze, AIA, Austin; Val Glitsch, FAIA, Houston; Julius Gribou, AIA, College Station; Jeff Potter, AIA, Longview; Bill Reeves, AIA, San Antonio; David Richter, FAIA, Corpus Christi; Ed Soltero, AIA, El Paso; Dan Wigodsky, AIA, San Antonio

## Contributing Editors

David Dillon, Dallas; Stephen Fox, Houston; Lisa Germany, Austin; Mike Greenberg, San Antonio; Nestor Infanzón, AIA, Dallas; Barbara Koerble, Fort Worth; Max Levy, AIA, Dallas; Gerald Moorhead, FAIA, Houston; Frank Welch, FAIA, Dallas; Willis Winters, AIA, Dallas; David Woodcock, FAIA, RIBA, College Station

## TSA Officers

Gabriel Durand-Hollis, AIA, San Antonio, President; President-Elect; David H. Watkins, FAIA, Houston; Dick Bundy, AIA, Wichita Falls, Vice President; Hollye Fisk, FAIA, Dallas, Vice President; Kathryn Lott, AIA, Austin, Vice President; Bryce Weigand, FAIA, Dallas, Vice President; Julius M. Gribou, AIA, College Station, Secretary; Timothy E. Donathen, AIA, College Station, Treasurer; Frank Douglas, FAIA, Houston, and David Messersmith, AIA, Midland, AIA Directors; David Lancaster, Austin, Executive Vice President

## TSA Board of Directors by Chapter

Robert Roadeap III, AIA, Abilene Chapter; Charles R. Lynch, AIA, Amarillo Chapter; Jay Barnes III, AIA, Austin Chapter; Chad Grauke, AIA, Brazos Chapter; William McCord, AIA, Corpus Christi Chapter; Mike Wells, AIA, Dallas Chapter; Tommy Razloznic, AIA, El Paso Chapter; Bill Slavik, AIA, Fort Worth Chapter; Timothy Conroy, AIA, Houston Chapter; Luis Figueroa, AIA, Lower Rio Grande Valley Chapter; Theresa Bartos Drexell, AIA, Lubbock Chapter; Dr. Lee Burch, AIA, Northeast Texas Chapter; William M. Reeves, AIA, San Antonio Chapter; Rob Clark, AIA, Southeast Texas Chapter; Larry Neal, AIA, Waco Chapter; Alfonso Y. Torres III, AIA, West Texas Chapter; Troy Secord, AIA, Wichita Falls Chapter; Lawrence Speck, FAIA, Austin, Educator Member; William Flaherty, Public Member; Mark Dabney, Intern/Associate Member

Periodicals Postage Paid at Austin, TX, and additional mailing offices. **Postmaster:** Send address changes to *Texas Architect*, 816 Congress Ave., Suite 970, Austin, Texas 78701-2443. Phone: (512) 478-7386. Printed in the U.S.A.

Subscription price is \$20 per year for TSA members, \$21 for nonmembers with addresses in the continental U.S. Reproduction of editorial content without written permission is prohibited. Use of names and images of products and services in either editorial or advertising does not constitute an endorsement by TSA or AIA, nor does comment necessarily reflect an official opinion of either organization. *TA* is indexed by the Avery Index of Architectural Periodicals, available in major libraries.

# A Clue, if Not a Trend

THE GREAT SURPRISE in putting together this issue was how few transportation projects were submitted. Apart from a couple of unbuilt projects and a rehab of the El Paso airport, what you see in our feature section—two airports, a streetcar station, and an urban village planned around pedestrianism—was what we got. Nevertheless, we're happy to publish these projects and think that they merit attention individually and as a group.

The two airport terminals—Austin-Bergstrom International Airport and Midland International Airport—are both splendid, efficient buildings. Unlike major international airports where the architectural reference is to flight—two examples being Renzo Piano's Kansai International Airport and Eero Saarinen's Dulles Airport—the architects in Austin and Midland also tried to capture the spirit of place. These airports were conceived to be the portals of their cities, to play the same role that train stations played at the turn of the last century. Indeed, one can't look at these terminals without thinking of those grand old stations. They share the same hopefulness, dignity, and civic pride.

Unfortunately, one also can't help but remember that not so long after the turn-of-the-century train stations were built, our rail system, which was one of the most efficient and complete transportation systems in the history of the world, was slowly dismantled, thanks to the lobbying efforts of the automobile industry. The federal government, which had subsidized the railroads, shifted its support to the automobile industry by building a vast interstate highway system, and then to aviation through defense spending and by subsidizing airports. Technology and a faith in linear progress ruled.

Now, it would be an act of hubris to try and guess what will happen to transportation in the 21st century, but if one looks at all four of these projects, one can spot a clue if not a trend. Going from airports to a streetcar station to an urban village, it appears that we are turning back the clock, but rather, we are diversifying, drawing on all of our resources and experience. The world is becoming such a crowded place, we can no longer rely on one or two forms of transportation. Intermodality is the key.

Judging from the scarcity of these transportation projects, Texas is running behind schedule. It has often been said that for Texans, the car replaced the horse as an emotional symbol of independence, and that we simply won't use mass transit. That appears to be changing. DART is an overwhelming success in Dallas, ridership exceeding all expectations. Houston has finally decided to make its first investment in light rail. Fort Worth is turning the old Texas & Pacific Terminal (1931, Wyatt C. Hedrick) into an intermodal center that will link pedestrians with taxi, bus, and rail.

After World War II, the automobile allowed the great flight to the suburbs. More recently, telecommuting was supposed to make it possible for us to live and work anywhere. But "face time," as they say in the computer business, is critical and, judging from the crowding and traffic jams in Silicon Valley, proximity is what counts. We are rediscovering our urban centers as places to both work and live, perhaps choosing location over technology, perhaps learning that technology isn't always the answer. When asked if modern inventions weren't wonderful, an Englishman in the 1840s gave an unequivocal "No." When asked if it wasn't wonderful that he could send his son a telegram in London, he replied, "Yes, but if it weren't for the train, I wouldn't have to."

*John Davidson*

**decoustics**

**Acoustical Wall Panels and Ceiling Systems**  
For over 23 years the Recognized Industry Leader

**TECHNICAL SERVICES**

Shop drawings, field assistance, mock up services

**CAD/CAM ROBOTICS**

Fully computerized "Robotic Cutting System"

**FINISHES**

Textiles, vinyl, coated, metallic and veneered woods

**ACOUSTICAL TEST DATA**

Decoustics provides complete laboratory reports

**FIRE TEST DATA**

Assemblies that meet fire codes

**QUALITY**

Design excellence and manufacturing quality

**FULL PRODUCT RANGE**

From standard wall panels to custom systems

Call 1-800-387-3809 for information  
or contact your local representative:

Dallas—Design Performance Associates 972/381-9100  
Houston, San Antonio, Austin—Specified Interiors 281/469-8073

**PBS&J**



**The Source for Engineering Excellence**

**Seamless . . .**  
**Comprehensive . . .**  
Engineering today's  
infrastructure solutions.

Transportation  
Environmental  
Civil  
Construction

Offices throughout the U.S.

|               |                |               |
|---------------|----------------|---------------|
| <b>Austin</b> | <b>Houston</b> | <b>Dallas</b> |
| 512.327.6840  | 713.781.8800   | 972.380.2605  |

[www.pbsj.com](http://www.pbsj.com) Circle 215 on the reader inquiry card

**P E T E R S E N   A L U M I N U M**

# METAL ROOFING

**In-line tension leveled, UL 90 rated, tested  
for air and water infiltration,  
continuous lengths**

**We** can provide roll formed panels in 24 ga. steel and .032 aluminum in a variety of Kynar 500® colors. Matching accessories are available as well.  
Call 1-800-441-8661 or visit our web site @ <http://www.pac-clad.com>



4295 Hayes Avenue, Tyler, TX 75707   1-800-441-8661   Fax: 1-903-581-8592  
Web Site: <http://www.pac-clad.com>

Other Plant Locations: Annapolis Junction, MD (1-800-344-1400), Elk Grove Village, IL (1-800-PAC-CLAD) and  
**NEW** Kennesaw, GA (1-800-272-4482)



Flush Panel



PAC-750 Soffit

**PAC-CLAD®**



Snap-on Standing Seam



Snap-on Batton



# Masonry Success Stories

## Speedy Construction

*"We've found that good contractors can erect the masonry walls of a 60,000 - 90,000 square foot theater anywhere from 8 to 12 weeks. The speed that masonry offers, allows for the other critical components of the building to begin early and ensure a timely delivery for Grand Opening dates that are established."*



**Gus Drosos**  
TK Architects, Inc.



**Feature Project:** Cinemark 19 Theater, Katy, Texas  
**Owner:** Cinemark USA, Inc.  
**Architect:** TK Architects, Inc., Kansas City, Missouri  
**General Contractor:** Satterfield & Pontikes Construction, Inc., Houston, Texas  
**Masonry Contractor:** East Haven Masonry, Houston, Texas  
**Masonry Supplier:** Southwest Concrete

### Speedy Construction Challenge

In the highly competitive movie theater industry, multiplex theaters need to be constructed in quick time frames allowing exhibitors to open in time for critical release dates. Reinforced masonry construction offers solutions to both aesthetic and economical concerns, while at the same time, making it possible to meet the schedule demands for the Grand Opening date.

### Speedy Construction Solution

Typically, there is very little lead-time required with masonry wall construction, something other solutions don't offer. On this project, the contractor was able to phase the building into three areas; this allowed the masons to keep progressing while steel and deck were being erected in already completed areas. To address low frequency concerns, which is extremely important in cinemas, masonry was used for demising walls between the auditoriums. In addition, these acted as bearing walls for the roof framing structure. The phased construction also allowed the general contractor more flexibility for starting other critical path trades earlier on the project, as well as, closing up the building quicker. To address the aesthetic requirements of the development, we introduced horizontal patterns of smooth faced and split-faced masonry above a brick wainscot. The brick veneer installation did not interfere with the progress of the masonry as it occurred after the masonry walls were erected.



**Masonry.**  
*Exceeding your expectations.  
Satisfying your clients.*



Before making your material decision, call the  
Texas Masonry Council at (888) 374-9922.  
Circle 207 on the reader inquiry card

Texas Masonry Council

*TA Present, TA Past.*  
Coming in 2000.



**ta<sup>50</sup>**  
Texas Architect at Fifty

## Pohl, Inc. of America Pohl Group of Companies

For many years, the Pohl Group has had a reputation in the curtain wall industry as a company that knows the meaning of service. The **Europanel**, used on the Austin Bergstrom Airport, is a drained and back ventilated metal cladding system based on the rainscreen principle.



Pohl products offer all the advantages of high quality metal wall cladding, such as architectural flatness, easy installation and maintenance. Pohl's large capacity raw material warehouse makes the fulfillment of even large orders fast and efficient. Pohl also offers full design service including the preparation of details and drawings. Pohl's state of the art equipment enables Pohl to produce metal products from a variety of materials such as aluminum, stainless steel, zinc, pre-aged copper and painted finishes

### Contact

**Pohl, Inc. of America**  
534 West 800 South  
Salt Lake City Utah 84101  
**Tel: 1 801 323 9993**  
**E-mail: sales@pohlusa.com**



## MORGANTI General Contractor

*for the \$120 million  
Austin-Bergstrom  
International Terminal*

450 Gears Road,  
Suite 800  
Houston, TX 77067  
(281) 873-0150

Circle 202 on the reader inquiry card

Circle 204 on the reader inquiry card

# Letters

## Who's a Critic?

In John Davidson's "Editor's Note", the statement is made that "the dialogue regarding architecture is rather limited in Texas. Only two newspapers—the *Dallas Morning News* and the *San Antonio Express-News*—have architecture critics on staff."

I note that a few pages later you announce that Michael Barnes, a critic for the *Austin American-Statesman*, was given TSA's John G. Flowers Award for Excellence in the Media, for which we are most appreciative.

The truth, as is known by your many members in Central Texas, is Michael Barnes is a distinguished architecture writer who has led the *American-Statesman's* expanded coverage and criticism in recent years. We recognize the importance of your profession to our community and to the built environment.

Michael Barnes meets any reasonable test of architecture coverage and commentary—whether it be time spent on the work, or ex-

perience—that could be applied to writers of our colleagues in Dallas and San Antonio.

**Rieb Oppel**

*Editor, Austin-American Statesman  
Austin*

P.S. I've checked with editors Gil Bailon in Dallas and Bob Rivard in San Antonio to verify the following: The Dallas critic works 32 hours a week, but he sometimes writes arts stories or news features, in addition to his core beat. The San Antonio writer actually is titled senior arts critic, and covers many other issues, including sustainable development.

### Editor Responds

Needless to say, we are delighted that Michael Barnes is covering architects and architecture in Austin. But I'm not aware of Michael taking strong positions—both pro and con—on projects in Austin, nor does he

play the role of an architecture critic in the same way that David Dillon does in Dallas or Mike Greenberg in San Antonio. Thanks to Michael Barnes, Austin is farther along than Houston when it comes to a dialogue about architecture, but coverage and criticism are two different things.

### Correction

In "TSA Announces 1999 honor Recipients" (*TA*, September/October 99, p. 17) Mayfest, Inc. was awarded a citation of honor for its efforts to maintain and improve the hike and bike trails along the Trinity River in Fort Worth, not Dallas as the article stated.

*TA* regrets the error.

## DESIGN WITH CONFIDENCE



9189-F Winkler  
Houston, Texas 77017  
Phone: 713/944-9716  
Fax: 713/944-1723

635 Lanark  
San Antonio, Texas 78218  
Toll-Free: 800/677-6393  
Phone: 210/599-6260

### Unmatched Service

- You receive a level of technical support and guidance unavailable from any other glass block producer.
- We will arrange for drawing review and technical guidance, full sample selection, and provide support after the job is completed, if needed.
- Our Technical Service Department is available for technical advice, project design assistance, and plan review.



[www.masonryglass.com](http://www.masonryglass.com)

# MARVIN

Windows and Doors

For more information, visit one of the centers listed below, or circle 28 on the reader inquiry card.

## MARVIN WINDOWS PLANNING CENTERS

**AUSTIN** 1214 West Sixth Street, Suite 102  
Austin 78703 800/333-9203 512/472-0955 Attn: Tom Braswell

**CORPUS CHRISTI** 800/698-6618  
361/814-7000 Attn: Harry Armenia

**DALLAS** 2619 Lombardy Ln. Dallas  
75220 800/888-3667 214/351-1186  
Attn: David Faulkner

**FORT WORTH** 4455 Camp Bowie Rd. #110  
Fort Worth 76107 800/955-9667 817/  
737-8877 Attn: Brent Greaves or Scott Pereth

**LONGVIEW** 1707 Loop 281 West  
Longview 75604 800/288-3667 903/  
759-9675 Attn: Lonnie Robinson

**LUBBOCK** Frontier Wholesale Co.  
833 E. 40th Lubbock 79404 800/444-3667  
806/744-1404 Attn: David Thompson

**MCALLEN BROWNSVILLE LAREDO  
FREDERICKSBURG KERRVILLE**  
800/698-6618 Attn: Bobby Garcia

**MIDLAND** 3303 N. Midkill, Suite 178,  
San Miguel Square Midland 79705 915/  
520-5442 Attn: Sean Hendrix

**SAN ANTONIO** 1211 Arion Pkwy., Ste. 106  
San Antonio 78216 800/698-6618 210-  
494-8889 Attn: Bobby Garcia, Harry Armenia

**LAS VEGAS** 6370 W. Flamingo #18  
Las Vegas, Nevada 89103 702/362-6270  
Attn: Saul Freeberg

**PHOENIX** 4841 South 36th Street  
Phoenix, Arizona 85040 800/558-8645  
602/438-1127 Attn: Saul Freeberg

**TUCSON** 7925A North Oracle Rd., #373  
Tucson, Arizona 85704 520/531-8511 Attn:  
Gary Corbitt

**TULSA** 800/283-6352 918/481-6352  
Attn: Gary Dawson

**OKLAHOMA CITY** 3211 Teakwood Lane  
Edmond, OK 73013 800/766-4690  
405/341-6775 Attn: Gary Dawson

**SHREVEPORT** 6535 Line Ave., Ste. 100  
Shreveport, LA 71106 318/869-4220 Attn:  
Lonnie Robinson


## New PyroTherm® CD Tops The Charts.



Inside this new hit CD you'll find:

- A complete Technical Support Guide
- A Video – "Setting a New Standard"
- COMPARE! – An interactive payback/cost guide

Learn all the reasons why PyroTherm® HPCMU's are revolutionizing masonry wall construction. For your FREE copy, call the PyroTherm® Hotline at 888-745-7559. Or visit us on the Web at [www.txi.com](http://www.txi.com) for more information.

 A TXI Product Group  
© 1999 TXI

  
The Concrete EP Film

Circle 242 on the reader inquiry card

# Thank You!

## Quality is the Solution!



# Teifs

WALL SYSTEMS

220 BURLESON • SAN ANTONIO, TEXAS 78202  
PH 210-472-2935 • FX 210-472-2946 • 1-800-358-4785  
E-MAIL: [teifs@teifs.com](mailto:teifs@teifs.com)

Circle 19 on the reader inquiry card

# A neighborly view to the city . . .

Set amid the elegance and quiet grace of restored historic homes, this is an office building with heart. Marvin's clad wood windows and doors have the clean lines and warm character that enhance and enliven a downtown panorama. Custom beauty and performance are standard with Marvin. At Marvin Windows & Doors, every window and door is made to order to ensure highest quality and design flexibility. Our extensive line of standard shapes and sizes offers easy control of your budget, too! Marvin's beauty is through and through. Long-lasting, durable performance—that's Marvin Windows! Beautifully made to order, one at a time!



2801 Swiss Avenue, The Meadows Foundation

architect

Good Fulton & Farrell Architects, Dallas

general contractor

Abstract Construction Company, Dallas

photographer

Ray Don Tilley, Bastrop



"Respect for neighboring Victorian homes greatly influenced this design. Marvin made it possible for us to borrow the double-hung burgundy windows of neighboring homes and to build them in monumental sizes to maintain Victorian proportions, even in a commercial building. Marvin provided a clad, factory-finished window with maintenance-free durability to stand up to the elements. With painted wood interiors and operable sashes, these windows even deliver a welcome residential feel inside."

— Dustin Slack, AIA, Good Fulton & Farrell Architects

Circle 28 on the reader inquiry card

**MARVIN**   
Windows and Doors

Made for you.

For a free product brochure, or to speak with a Marvin Windows Planning Centers professional, call your nearest location, listed on the facing page, or call 800-888-3667. [www.marvin.com](http://www.marvin.com)

# News

## **Houston Chooses Rail** 12

**HOUSTON** After countless studies, Houston takes the plunge and commits to 7.5 miles of light rail on Main Street.

## **Dallas Reclaims the Trinity** 13

**DALLAS** Is it half-baked, or are they half-cocked? The \$1.2 billion Trinity River Master Plan still isn't finished, but the Dallas City Council votes to proceed.

## **Renzo's Return** 14

**DALLAS** First the Menil Collection, then the Cy Twombly Gallery. Now Renzo Piano comes back to design the Nasher Sculpture Center.

## **Of Note: Gotham** 16

**AUSTIN** A Houston developer alarms Austinites and the bats under the bridge with his plans for the Gotham.

## **Of Note: UT Tower** 17

**AUSTIN** Architect and metal artisan Lars Stanley meets a unique challenge on the observation deck at the University of Texas Tower.

## **Calendar** 17

## **Three Firms Audition for Performing Arts Center** 20

**AUSTIN** Barton Myers of Beverly Hills, James Polsheck of New York, and SOM of Chicago are finalists to transform Austin's Palmer Auditorium.

## Houston Chooses Rail

**HOUSTON** "The most rail-studied city on earth" has taken the plunge. The Board of Directors of Metro, the Metropolitan Transit Authority of Harris County, voted at their September 23 meeting to proceed with a 7.5-mile light-rail line for the downtown-to-Astrodome corridor. The decision came at the end of a year-long, federally mandated major investment study that weighed the feasibility, cost, and environmental impact of three options: a future baseline alternative of continued roadway and bus route improvements, an enhanced bus alternative (limited-stop bus service in a dedicated lane), and a light-rail alternative.

Given the 20-year-old authority's current transit strategy of general roadway improvements, carpool lanes, park-and-ride centers, and bus service, light rail was the most radical alternative. At an estimated price tag of \$272 million, it was also by far the most expensive, compared to \$75 million for the enhanced bus system.

Metro's strategy in building public support for the project downplayed the rail line as only a small part of their overall mobility plan. Indeed, the estimated cost of the line represents only about 6 percent of the total \$4.3 billion in improvements projected for the years 2000 to 2010. The bulk of the funds will go toward roadway improvements and an expansion in bus service.

Among the most vocal of the rail detractors were the Harris County Republican Party and the Houston Property Rights Association, an advocacy group that is generally against any form of governmental expansion, land use regulation, or anything it views as an infringement of individual liberties. Their chief concern was the proposal's cost/benefit ratio; the significantly higher cost of rail would not add appreciably to ridership and would have a negligible effect on reducing traffic congestion and air pollution.

Their concerns were not without merit. With an overall population density of fewer than five persons per acre, Houston has always faced something of a chicken-or-egg conundrum regarding transit. There is insufficient density to justify rail service, but the density will not occur by continuing to rely on a car-based mobility strategy.

Supporters of the rail line see the project as an essential investment in Houston's fu-

ture, particularly as a way to target economic development along the corridor. They note that the downtown-to-Astrodome route presents unique opportunities. The proposed alignment links some of Houston's most significant centers, notably downtown, the Texas Medical Center, the Museum District, and the Astrodome complex. It also traverses several significantly underdeveloped areas in Midtown and around the Astrodome.

While the opportunity may be real, it will take more than Metro's investment to take full advantage of it. Much of the proposed route runs along Main Street, which, despite several bright spots, suffers from the inner-city neglect seen so often as a result of suburban sprawl. A broad group of public and private stockholders known as the Main Street Coalition has been working for the past year to build support for a major urban enhancement project along Main Street. Their vision of transforming Main Street into "Houston's signature boulevard" involves creating a dense, mixed-use, pedestrian-friendly, and transit-oriented urban neighborhood. In fact, METRO has been collaborating with the coalition to coordinate their plan in support of this larger vision.

While the still evolving plan for Main Street shows promise, it is based primarily on improvements to the public realm. Houston is notorious among American cities for its lack of zoning and distaste for comprehensive land use planning. As yet unadvised in the planning effort are the strategies and guidelines that will steer the private sector to provide the kind of development needed to transform the corridor into a vigorous urban neighborhood.

Can Houston put all the pieces together? Only time will tell, but this much is clear; Houston must change its habits and support this rail line with carefully targeted incentives and thoughtful development guidelines.

*James Hill*

*James Hill is an architect in Houston.*

## Dallas Reclaims the Trinity

**DALLAS** On August 25 the Dallas City Council approved a \$1.2 billion plan for the Trinity River, without having laid eyes on a final document. They voted on the basis of slide presentations and outlines provided by consultants and city planning staff.

"Folks, we've got to get going on this," urged Mayor Ron Kirk, who has made the Trinity a cornerstone of his administration. "We're always for something until it comes time to make a decision." But several council members, angered by the sketchy information about costs, environmental effects, and other basic issues, insisted that a second vote be taken when the plan is completed, probably in October. "We're working on some vague concept that none of us can comprehend in any detail," said council member Donna Blumer, one of three "no" votes.

As bizarre as all this sounds, it is business as usual for the Trinity, the meandering drainage ditch that Dallas has been trying to reclaim for nearly 100 years. Two previous bond referendums failed, and no proposal has ever enjoyed overwhelming public support. In May 1998 Dallas voters barely approved \$246 million as the city's contribution to the project, but the debate has continued.

The Trinity Plan, known officially as the Trinity River Corridor Master Implementation Plan, rests on four basic ideas: recreation, flood control, transportation and economic development. The recreational component consists of trails, parks, nature preserves and a 135-acre downtown lake, which would sit in the middle of the flood plain and be fed by groundwater and treated effluent. A second lake might eventually be constructed farther downstream. Half Associates of Dallas, the consulting engineers, have shown that the lakes are feasible; the bigger question is feasible for what? They will be large enough for canoes and paddleboats but nothing bigger. And because the Trinity is classified as "suitable only for non-contact recreation," they will be off-limits to swimmers as well.

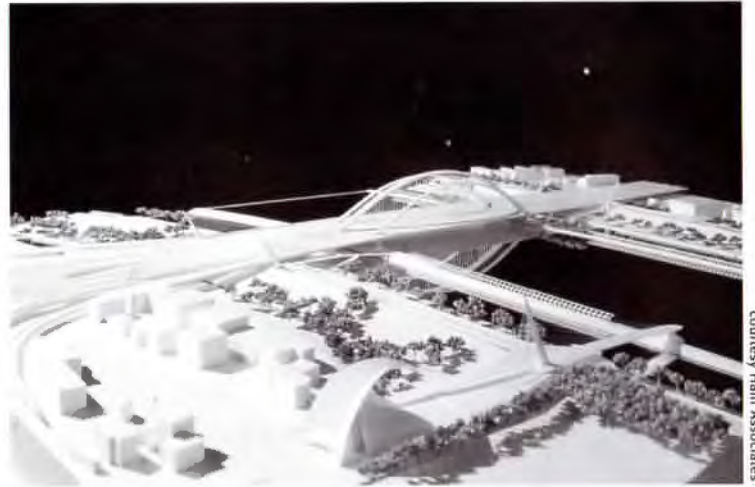
To reduce the threat of downtown flooding, the plan also recommends creating a series of wetlands south of the business district and new levees at Lamar Street and Cadillac Heights, a predominantly African-American neighborhood on the west side of the Trinity. The Lamar Street levee would protect future development sites, but, in the opinion of

many engineers and environmentalists, the Cadillac Heights levee will do little for the neighborhood because it has become a toxic waste dump. They recommend that the city buy out the homeowners and allow the area to flood naturally; the city contends that buyouts don't make economic sense and that residents don't want to move.

The Trinity toll road remains the most controversial part of the plan. As proposed, it would run inside the levees from Highway 183 near Irving to Highway 175 in southeast Dallas. The stated purpose of the road is to relieve gridlock on downtown freeways by siphoning through-traffic onto alternative routes. Opponents argue that the toll road would create one more barrier between the city and the river, while introducing noise and pollution into what is supposed to be an urban oasis. The cost of locating the road outside the levees could be offset, they contend, by federal transportation subsidies and by tax revenue generated by new development.

The most visionary elements in the plan are the five arched bridges designed by Spanish architect Santiago Calatrava. Included are an extension of Woodall Rodgers Expressway into West Dallas, crossovers at the north and south ends of the proposed toll road and replacements for the I-30 and I-35 bridges, which are scheduled to be rebuilt. Instead of replacing existing structures with fatter and uglier versions of the same design, Dallas could acquire an ensemble of civic gateways that would also reconnect two halves of the city. The chief stumbling block appears to be money. The Calatrava bridges would cost approximately one-third more than conventional pier-and-beam structures, which has led some critics to dismiss them as frills.

The biggest hole in the Trinity plan is economic analysis. Although its advocates predict a windfall for the city, no comprehensive study has been done of what the \$1.2 bil-



courtesy Half Associates

Santiago Calatrava's proposed bridge for I-30

lion in public investment could mean for downtown, the riverfront, the neighborhoods, and the region. The city seems inclined to sit back and follow the market instead of establishing a framework and ground rules for future development.

Assuming the Dallas City Council blesses the final Trinity plan in October, the future shape of the river corridor remains unclear. The mandatory environmental impact statement for the toll road could change its alignment. Both the road and the Calatrava bridges face significant funding shortages; the Army Corps of Engineers has yet to place its final imprimatur on the levees; there are threats of lawsuits. All of which means that the reclamation of the Trinity, though closer than ever before, is still not certain.

**David Dillon**

*David Dillon is the architecture critic for the Dallas Morning News and a contributing editor for Texas Architect.*

## Renzo's Return

**DALLAS** Renzo Piano is back. The Nasher Foundation recently announced that the 1998 Pritzker Prize-winning architect who created two of Texas' most artful buildings, the Menil Collection and the Cy Twombly Gallery in Houston, has been chosen to design the Nasher Sculpture Center in Dallas. Raymond Nasher, one of the country's leading collectors of 20th century modern and contempo-



Photos © Stefano Goldberg

rary sculpture, explains the decision this way. "I made the determination that Renzo Piano was a very important thinker in relationship to art."

Nasher is no stranger himself to expounding on the manner in which art enhances our experience of the world. Years ago, the Nasher Company incorporated sculpture by artists including Jonathan Borofsky, Mark di Suvero and Henry Moore as an integral part of NorthPark Shopping Center, a suburban project that received the American Institute of Architects Award for "Design of the Decade—1960s." (Landscape architect Richard Vignolo, advisor on a number of the company's building programs including NorthPark Shopping Center, will advise Piano.) The collector's home, filled with major works by Alexander Calder, Willem de Kooning, Joan Miró, Auguste Rodin, Richard Serra, and an impossibly long list of other art stars, encourages a dialogue with and about art that is both intimate and unforgettable.

For a number of years, museums across the country such as the National Gallery of Art in Washington D.C. wooed Nasher, hoping he would leave his collection in their care, but, despite the cost, he chose to create his own open-air museum in Dallas. It is the city where he lived with his late wife Patsy, whose keen eye and passion for collecting matched

his own, where the couple raised their children, and where the developer continues to make his mark. Now, two years after he selected the Dallas site, and after a lifetime of touring the world's finest museums, Nasher is certain he's found the right architect. Perhaps attending the opening of Piano's Beyeler Foundation Museum in Basel, Switzerland, which, like the Twombly Gallery, uses natural light as the guiding design principle, influenced his decision. No doubt, it didn't hurt that the versatile architect designed the world's largest airport in Osaka, Japan.

"In the end, it was Renzo's vision for the institution, his inspiring achievements, and his enthusiasm for the project which made him the perfect choice," Nasher says of the Dallas project. "There's no model for it, this urban sculpture center in the bowels of the city, with a rotating sculpture collection and educational institute." He envisions that his \$32 million gift to Dallas (the Nasher Foundation will fund all costs associated with the development, maintenance, and programming for the center) will provide an oasis in the midst of the city's urban environment.

The center's two-acre site located between the Dallas Museum of Art (DMA) and the Morton H. Meyerson Symphony Hall in the Dallas arts district will include an outdoor exhibition area as well as an indoor gallery, and an institute for modern and contemporary sculpture. Visitors will have the opportunity to see changing exhibitions of objects from one of the finest collections of modern sculpture in the world, a collection that continues to grow. At the same time, the foundation will continue to loan works to museums world wide and presumably lure their treasures to Dallas. Nasher is certain that, "with the rotating exhibitions and partnerships with other institutions, Dallas will have the opportunity to be an international center for modern sculpture around the world."

Benefiting from all that international at-



2



3

1 Architect Renzo Piano

2 Raymond Nasher in 1987, standing before David Smith sculpture, "Voltri VI."

3 Raymond and Patsy Nasher on a construction site at NorthPark Shopping Center in 1965





tion will be the DMA across the street, which owns a complementary and much broader collection of objects. Nevertheless, the Edward Larrabee Barnes building itself appears to take a dim view of Nasher's project; its stern, windowless facade discourages an easy relationship between the two institutions. Nasher had hoped the city would close the street between the two, but neighboring property owners took up arms over the potential restriction of traffic flow.

Renzo Piano sided with Nasher's opponents. "You must accept the city as it is, not try to create some kind of kingdom of art," the architect advised his client. Piano's Centre Pompidou, a contemporary art museum developed with British architect Richard Rogers, and the reconstruction of the nearby Constantine Brancusi studio thrive in a bustling mixed-use neighborhood in the middle

of Paris. Nasher now seems content that Harwood Street will narrow to three lanes with wide sidewalks and a double row of trees in front of the museum. The Sculpture Center and the DMA will collaborate on programming, audience development, parking, and security, rather than establishing a physical link. In fact, within the next month, the DMA has plans to host a program with the Nasher Sculpture Center; Renzo Piano is coming to town and will speak at 3:00 p.m. on November 10 in the Horchow Gallery at the Dallas Museum of Art.

*Rebecca S. Coben*

*Rebecca S. Coben writes about art for the Austin Chronicle and Texas Monthly.*

Joan Miró's  
"Moonbird," bronze,  
1944-1946



George Bush Int. Airport Control Tower-Houston



Midland Int. Airport Terminal-Midland

**Quality is our Reputation**

- General Construction
- Design/Build
- Construction Management



**MW Builders, Inc.**

1701 North General Bruce Drive  
Temple, TX 76504-2474  
Fax: (254) 778-9492  
[mwbtx@mmccorps.com](mailto:mwbtx@mmccorps.com)



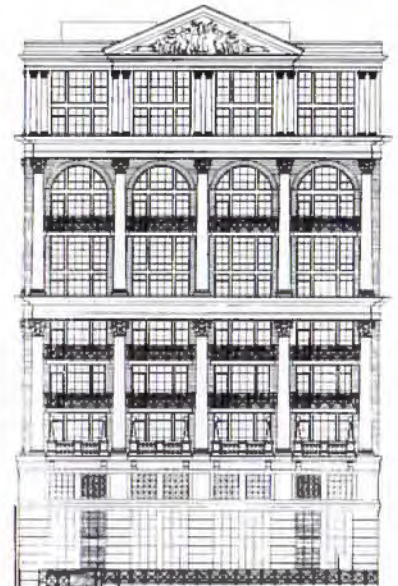
(254) 778-4241



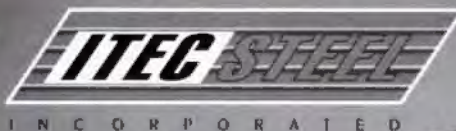
Austin Bergstrom Int. Airport Parking Garage-Austin

## Of Note: Gotham on the Lake

**AUSTIN** The city is up in arms over the Gotham, a 12-story condominium that Houston developer Randall Davis is building at 200 Congress Avenue, just south of the Congress Avenue bridge. The Austin City Council passed Davis' zoning request, but the Austin Neighborhoods Council, the South River City Citizens, and the South Congress Improvement Project plan to fight the project on the grounds that it obstructs sight-lines to the Capitol and diminishes the park-like character of the hike-and-bike trail. Responding to criticism that the neoclassical building was too "Las Vegas," Page Southerland Page of Austin has removed statuary from the front and back of the building's original design and the word "Gotham" over the entrance. The *Austin Chronicle's* depiction of the Gotham to the left, the architects' elevations to the right.



## TOTAL FRAMING SOLUTIONS



ITEC offers a total, comprehensive framing solution that more and more architects and engineers, contractors and developers are turning to every day.



### OUR TOTAL SYSTEM IS YOUR SMART SOLUTION

- The proprietary ITEC system is completely engineered, using light gauge galvanized steel framing configured for commercial walls, floors and roof truss applications. And our system is being used increasingly for innovative residential construction.
- Superior truss strength allows clear spans of up to 60 feet or more.
- Precise engineering and manufacturing techniques insure consistent quality, with minimal waste.
- Complete system includes all fasteners, clips and plates needed for assembly.
- Structural top plate with pre-cut studs utilize dimensionally stable materials.
- Every job includes detailed drawings which minimize confusion and maximize framing labor efficiency.

It's an intelligent, innovative system that's right for you.

*Because it's right for today.*

ITEC Steel, Inc. • 1020 Shady Oaks Drive • Denton, Texas 76205 • 940.383.0593 • Fax 940.383.3794 • [www.itecsteel.com](http://www.itecsteel.com)

# Join TSA/AIA Today!

Please contact me about the services and benefits of joining the Texas Society of Architects / American Institute of Architects.

Circle your Chapter (if known):

Name: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Firm/School: \_\_\_\_\_  
 Type of Firm: \_\_\_\_\_  
 Busn. Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_  
 Home Address: \_\_\_\_\_

- Abilene
- Amarillo
- Austin
- Brazos
- Corpus Christi
- Dallas
- El Paso
- Fort Worth
- Houston
- Lower Rio Grande Valley
- Lubbock
- Northeast Texas
- San Antonio
- Southeast Texas
- Waco
- West Texas
- Wichita Falls

## Find out more about TSA/AIA

Architects and interns! We'll send you more information on the many benefits of joining the Texas Society of Architects / American Institute of Architects.

To subscribe by phone, call **512-478-7386**

Save 13% off the cover price by subscribing to TA. If you include payment with your order, you'll receive plus a bonus seventh issue free!

## Get Product Information

Get additional information about products and services advertised in this issue! Fill out the attached card and drop it in the mail to us. We will forward your requests immediately.

## Subscribe to TA and Save!

- 1 year/6 issues, \$21 13% off the cover (foreign: US \$35 per year.)
- 2 years/12 issues, \$38 21% off the cover
- Student rate, one-year, \$15 38% off the cover
- Payment enclosed. One free issue on a one-year subscription, 7 in all; or TWO free issues on a two-year subscription, 14 in all.
- Bill me. (Visa, Mastercard and AMEX accepted)

What is your primary business or industry? (please check only one)

- Architecture or A/E firm
  - Engineering firm
  - Architectural design (not headed by reg. architect)
  - Interior design
  - Landscape architecture
  - Contractor or builder
  - Government
  - Commercial/Industrial/Institutional
  - College personnel or library
  - Architecture student
  - Public library, professional club, society, or trade association
  - Supplier of building or interior furnishing products
  - Other allied to the field
- Please specify: \_\_\_\_\_

Name: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Firm/School: \_\_\_\_\_  
 Mail Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_  
 Billing Address (if different from above): \_\_\_\_\_

## Product Information

November/December 1999

This card expires January 31, 2000

Please check the appropriate boxes below:

**Job Function:**

- Owner/Principal
- Manager/Dept. Head
- Staff Architect
- Project Manager
- Intern Architect
- Designer
- Interior Designer
- Engineer
- Client

Do you write or approve product specifications?  Yes  No

**Type of Business:**

- Architectural or A/E Firm
- Consulting Engineering
- Contractor or Builder
- Commercial, Industrial, or Institutional
- Government Agency
- Interior Design

**Information Needed for:**

- Current Project
- Future Project
- New Building
- Remodeling

**Type of Contact Requested:**

- Have your representative call me.
- Send more detailed technical information.
- Send samples or demonstration package.

Name \_\_\_\_\_  
 Firm/Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_  
 Position \_\_\_\_\_  
 Telephone \_\_\_\_\_

Circle the appropriate reader inquiry number(s)

- |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  |
| 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  | 59  | 60  |
| 61  | 62  | 63  | 64  | 65  | 66  | 67  | 68  | 69  | 70  | 71  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  | 80  |
| 81  | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  | 90  | 91  | 92  | 93  | 94  | 95  | 96  | 97  | 98  | 99  | 100 |
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 |
| 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 |
| 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 |
| 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 |



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**BUSINESS REPLY MAIL**

FIRST-CLASS MAIL PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

**Texas Society of Architects**

816 CONGRESS AVE #970  
AUSTIN, TX 78701-2443



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**BUSINESS REPLY MAIL**

FIRST-CLASS MAIL PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

**TEXASARCHITECT**

816 CONGRESS AVE. #970  
AUSTIN, TX 78701-2443



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



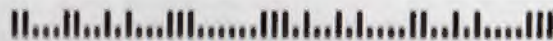
**BUSINESS REPLY MAIL**

FIRST-CLASS MAIL PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

**TEXASARCHITECT**

816 CONGRESS AVE. #970  
AUSTIN, TX 78701-2443



## Of Note: UT Tower Reopens

**AUSTIN** The University of Texas commissioned Austin architect and metal artisan Lars Stanley to design and build an enclosure for the observation deck at the UT Tower (1937—Paul Cret), which opened to the public for the first time in 24 years. As the site of seven suicides and the infamous Charles Whitman sniper attack in 1966, the Tower presented extraordinary security problems and a unique architectural challenge. Stanley avoided any solution that would suggest a "cage" or create the sensation of en-

closure. Instead, he opted for a lattice of wrought iron and stainless steel. The lattice arches over the observation deck as an extension of Cret's original stone scrollwork. Stanley made hand-forged wrought iron scrolls to attach the lattice to the building.

1 Lattice work under construction at UT Tower

2 Detail of wrought iron scroll



photos courtesy the University of Texas at Austin



## CALENDAR

### AIAS Annual Forum

The American Institute of Architecture Students will hold its annual forum in Toronto, Canada. Lecture topics include selecting a graduate school or internship, architects working in other design fields, technology in architecture firms, and international architecture. Keynote speakers are AIAS distinguished alumnus, Bruce Kuwabara of Kuwabara, Payne, McKenna, Blumberg in Toronto, and architect Moshe Safdie, of Moshe Safdie & Assoc., Inc. Thanksgiving dinner will be served. For reduced airfare or registration information, e-mail [ikik@mail.utexas.edu](mailto:ikik@mail.utexas.edu). AIAS (202/626.7472, e-mail [aiasnatl@aol.com](mailto:aiasnatl@aol.com), [www.aiasnatl.org](http://www.aiasnatl.org)) NOVEMBER 23-27

### Pritzker on Display

Twenty years of Pritzker Prizes will be exhibited at the Carnegie Museum of Art. The work of previous winners such as Frank Gehry, Richard Meier, Kinzo Tange and current recipient, Sir Norman Foster are included. Recognizing living architects' creativity, contributions and commitment to architecture, the Pritzker Prize is the most prestigious award that can be bestowed upon an architect. Heinz Architectural Center, Carnegie Museum of Art, Pittsburgh, Penn. (412/688.8690) THROUGH FEBRUARY 27

### Dallas Celebrates Architecture

"Celebrate Architecture," an evening of recognition for distinguished architects, planners and designers who have shaped our environment, will be hosted at the Great Hall of the Dallas Apparel Mart. The 1999 AIA Design and Community Honor Awards will be presented by members of the Dallas Young Architects Forum and designers, followed by a silent auction of art by prominent architects. Contact Jeff Jensen (214/969.5599) or Mardi Rendell (214/871.2788) NOVEMBER 12

### Rivera Retrospective

An exhibition of Diego Rivera's work is at the Museum of Fine Arts in Houston. The retrospective exhibition of the artist explores the last 30 years of his life and controversial career, focusing on his blending of European modernism and Mexico's pre-Columbian history. The Museum of Fine Arts, Houston (713/639.7300) THROUGH NOVEMBER 28TH

# Commerce on the Cutting Edge!

Arriscraft Affordable Stone with the Natural Edge™

Looking for a new edge in business? Choose Arriscraft, the stone product with The Natural Edge™. Arriscraft's Natural Process technology replicates nature's formation of sedimentary stone affordably.

Enjoy the unique benefits of Arriscraft:

• Natural Edge™ technology

• Consistent high quality and exceptional severe weathering durability

• Natural finishes

• No additives, such as sealers, required after installation

• Unparalleled color

• Complete customization

• Over 50 years of proven performance

• Installation using standard masonry techniques

Now available in Texas. Call your local distributor today.

**ARRISCRAFT**  
**INTERNATIONAL Inc.**  
STONE • MARBLE • LIMESTONE • BRICK

Park Ventura Office Center  
Plano, TX  
ARCHITECT  
Randy Egger, AIA  
PGAL Architects, Dallas  
MASONRY CONTRACTOR  
Skinner Masonry, Dallas

Austin area  
Elgin-Butler Brick Co.  
TEL 812-463-7300  
FAX 812-463-7473

Dallas/Ft. Worth area  
Blackson Brick Co.  
TEL 214-855-5051  
FAX 214-855-5254

Houston area  
Upchurch/Kimbrough Co.  
TEL 713-857-1520  
FAX 713-857-1288

or visit our website:  
[www.arriscraft.com](http://www.arriscraft.com)

Circle 57 on the reader inquiry card

**ARRISCRAFT**  
INTERNATIONAL Inc.  
STONE • MARBLE • LIMESTONE • BRICK

For samples  
and pricing, call:

Austin area

Elgin-Butler Brick Co.

TEL 512-453-7366

FAX 512-453-7473

Dallas / Fort Worth area

Blackson Brick Co.

TEL 214-855-5051

FAX 214-855-5254

Houston area

Upchurch/Kimbrough Co.

TEL 713-957-1520

FAX 713-957-1268

or visit our website:

<http://www.arriscraft.com>



Circle 37 on the reader inquiry card

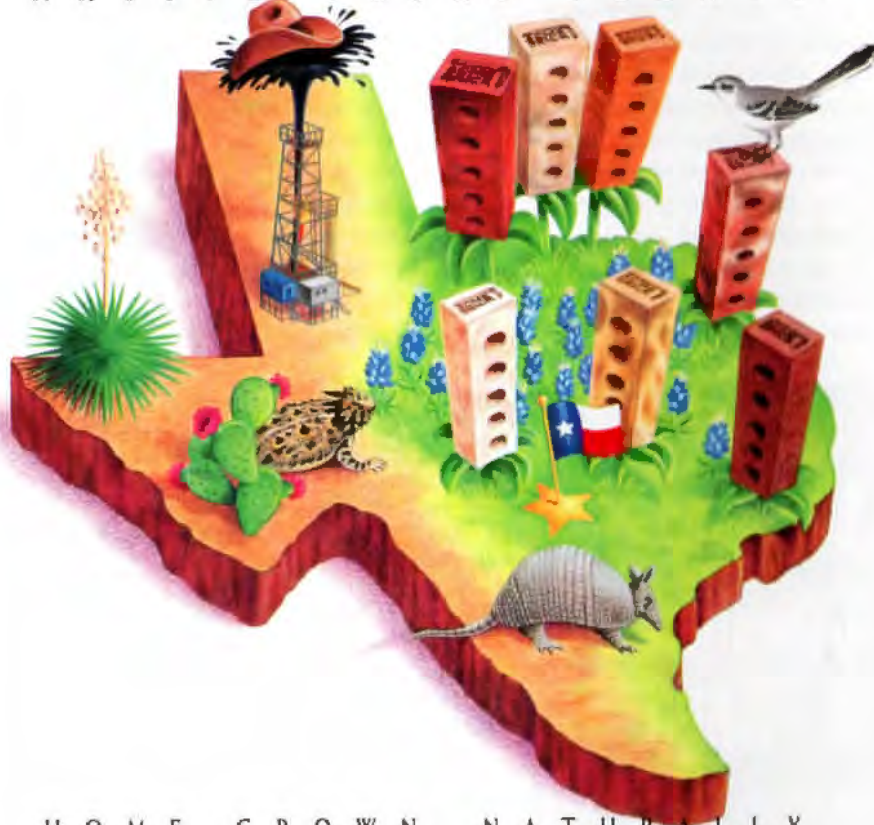
NEWS

COMING NEXT ISSUE.

**TexasArchitect 2000**

REDESIGNED. REVAMPED. RECHARGED.

NATIVE TEXAS PLANTS.



H O M E G R O W N , N A T U R A L L Y .

Acme Brick. Texas-based and Texas-proud.

The ideal building material for your next project is made right here in the Lone Star State from native soil. With seven plants and fourteen sales offices across the state, Acme Brick spends \$70 million in Texas each year. These dollars help bolster the local economy, which means more potential business for Texas architects. Insist on the same quality that architects have relied on since 1891.

Together, we keep Texans working and the Texas economy growing.



Check your phone directory to contact your local Acme Brick Company sales office.

Circle 16 on the reader inquiry card

Texas Architect 11/12 1999 19

## Three Firms Audition for Performing Arts Center

**AUSTIN** As the transformation of Austin's Palmer Auditorium into the Long Center for the Performing Arts moves from the realm of dreams into the world of reality, two architects will mark their anniversary with the project. Six years ago, Austin architects Stan Haas and Michael Guarino seized upon the idea that Palmer would be the perfect answer to the needs of Austin's performing arts groups, including the symphony, the opera, and the ballet. Playing the unsung role of architectural advocates, they studied the 1959 structure, developed a way for it to accommodate two auditoriums and a smaller, flexible space (known in the theater world as a "black box"), and sold the idea to the arts groups, who came together to form Arts Center Stage two years ago. "Michael did sketches," Haas recalls, "and it began to open eyes." The two logged as many as 96 hours speaking to different groups about the possibilities of the transformation. "They pioneered the whole thing," says Austin architect Wayne Bell, chairman of the design committee for Arts Center Stage, "and they did it *pro bono*."

Now Haas and Guarino, who never believed that they had the experience to take on the job themselves, are the very interested bystanders in Arts Center Stage's selection of an architect. In fact, the board of trustees generously urged all Austinites to share that role when they invited the public to lectures by their finalists on three nights in late September.

The selection will be made from a short list that includes Barton Myers Associates, Inc. of Beverly Hills, Polshek Partnership Architects, New York, and the Chicago office of Skidmore, Owings & Merrill (SOM). Although these firms all share a proven capability with theater design and a flair for capturing the dazzle that makes theater-going exciting, what differentiates them (and may become critical for the board of trustees of Arts Center Stage) is the nature of their various practices. Barton Myers, for instance, is the single head of a 20 person firm; Polshek likes a pluralistic approach made up of inter-generational partners; and SOM multiplies that team-building approach to a much larger, corporate level.

Center for the Performing Arts involved the conversion of a historic theater into a concert hall in a complex, adding two new performance spaces.

Before showing any slides of work, James Stewart Polshek spent a good fifteen minutes explaining his philosophy of design. He remarked that if his lecture had a title it would be "The Transformations of Existing Places," and then proceeded to describe how his firm operates a little like a Cistercian abbey—"a small, feisty, questioning place." Announcing that he "would rather transform something than build it from scratch," he began to discuss various renovation projects. Slides of his Rose Center for Earth and Space in New York City showed the design respecting the circular opening of the 128-year-old institution by enlarging the idea of the circle into a full, three dimensional sphere. His addition to a hall at Columbia University Law School opened the building up in a similarly sculptural and light-filled way. In the realm of theater design, the examples were impressive: the redesign of the famous Santa Fe Opera Theater and the renovation and expansion of New York's Carnegie Hall.

The first to speak was Barton Myers, who mounted the stage dressed in blue jeans with a coat and tie. Such a casual demeanor was immediately belied, however, by the scope and visual impact of the very formal work he flashed on two slide screens. His New Jersey Performing Arts Center for Newark, which mixed two performance theaters with restaurants and community rooms, catalyzed the urban renewal of the once-blighted downtown. His Cerritos Center for the Performing Arts, in Cerritos, California, boasts an auditorium that can be configured in five different arrangements. His Portland

"In order to change something, you have to understand it," read a letter to the selection committee from SOM. This was a note struck repeatedly as four architects from the famous firm reminded the audience that SOM "defined the age of modernism, the age in which the Palmer Auditorium was built." Slides of the Lever House, the Air Force Academy, and even the LBJ Library and Museum in Austin illustrated the point. After a formal introduction by senior partner Bob Wesley, three younger partners took turns describing SOM's recent work; the master plan of Ravinia Festival, the famous outdoor location of the Chicago Symphony Orchestra, provided one strong example, and was matched by dozens of other theaters from around the world. SOM's renovations of Chicago's most venerable concert halls—the 1928 Art Deco-style Lyric Opera and the 1927 Symphony Center originally designed by Daniel Burnham—stand out as models of sympathetic modernization.

During each presentation there was a lot of talk about Austin, and what kind of city Austin is. No one mentioned that Austin voters enthusiastically supported the transformation of Palmer in a referendum last year, or that half of its \$50 million cost has already been pledged.



**Make Your Next Ceiling Project A "Snap"!**

**NEW** Luxalon Wide Panel creates an attractive acoustical ceiling that installs easily. The clean subtle design and the ease of installation sets Luxalon Wide Panel apart from traditional ceiling systems. The easy installation saves time and labor making the entire system very affordable. The only thing easier is calling 1-800-366-4327.

**LUXALON**<sup>®</sup>  
A HunterDouglas<sup>®</sup> PRODUCT

HUNTER DOUGLAS ARCHITECTURAL PRODUCTS, INC.  
5015 Oakbrook Pkwy., Ste. 100 • Norcross, GA 30093 • 800-366-4327  
www.hunterdouglascellings.com





Robert Reck



Hedrich Blessing



courtesy Barton Myers, Inc.

1 Santa Fe Opera, by Polshock Partnership

2 Symphony Center, by Skidmore, Owings & Merrill

3 Cerritos, by Barton Myers Associates

There was little talk of Palmer's site—on a hillside that slopes down to Town Lake and looks north, taking in a close-up view of downtown. Instead, the presentations focused on Austin's quirky sense of itself

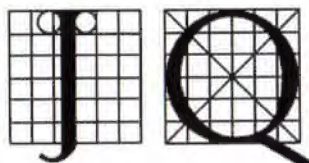
and ended up sounding a bit like the proverbial blind men describing different parts of the elephant.

There will be time enough for the winner to understand the character of the city. Maybe the clues can be discovered in Palmer itself. After all, when Haas and Guarino began to appreciate Palmer's siting, its stunning glass walls, its roof of aquamarin aluminum panels, and its flying-saucer dome, they knew the building was

too good to pass by. It had thrilled the city once, might it not thrill it again? "Converting that building on that fabulous site—recycling it in a way—is the Austin kind of thing to do," says Haas with an enthusiasm undiminished by six years of stewardship.

*Lisa Germany*

*Lisa Germany is a new contributing editor for Texas Architect.*



## JASTER-QUINTANILLA & ASSOCIATES, INC.

CONSULTING

1608 WEST SIXTH STREET □ SUITE 100

512 474-9094

EMAIL [jkaus@onr.com](mailto:jkaus@onr.com)

ENGINEERS

□ AUSTIN, TX 78703

FAX 512 474-9179

*Jaster-Quintanilla is proud to have provided civil and structural engineering services for various projects at Austin-Bergstrom International Airport.*

- › Barbara Jordan Passenger Terminal
- › Terminal Access Road and Parking Lots
- › West Concourse Addition
- › Air Rescue and Fire Fighting Facility
- › Communications Building
- › Central Utility Plant
- › Transit Facilities



□ AUSTIN



□ SAN ANTONIO



□ DALLAS

# ICI ULTRA-HIDE<sup>®</sup> BUILDTEX<sup>™</sup>

**High-Build Acrylic Latex Texture Coating**

*Tintable Interior & Exterior High-Build  
Acrylic Latex Texture Coating*

**BUILDTEX** can be tinted to provide a variety of design possibilities. See your ICI Dulux Paint Centers Store Manager, Sales Representative or Specification Consultant for additional color selections.



## Features

- One coat application to 40 mils wet film in one spray pass
- Ideal for use on pre-cast concrete substrates to minimize surface variability
- Tintable
- Hides imperfections
- Excellent flexibility and durability
- Interior or exterior use
- Ready-mix texture
- Easy soap and water clean-up
- Low odor
- Low VOC
- Performance alternate for Federal Paint Specification TT-C-555B

## Interior & Exterior Use

A premium quality acrylic latex high-build texture coating for use on properly prepared interior drywall, interior and exterior masonry, wood, metal and sound painted surfaces.

Specially formulated to provide a uniform textured appearance to rough and irregular surfaces.

May be applied at up to 40 mils wet film thickness in one spray coat. Available in medium and coarse textures.

*For further information contact:*

Jack Stout, GDT, CSI  
(713) 680-3377  
jack\_stout@ici.com

Frank Fuller, CSI  
(972) 417-7509  
frank\_fuller@ici.com

Circle 133 on the reader inquiry card

**ICI Dulux Paint Centers<sup>®</sup>**

**Dulux<sup>®</sup>**

**Glidden**

**DEVCO**  
COATINGS

THE BEST WAY TO GET A  
10-FOOT STUD FREE OF WARPS AND  
SPLITS MAY BE TO CUT ONE OF OUR  
20-FOOTERS IN HALF.



Introducing the new FrameWorks® Wall System—featuring TimberStrand® LSL premium studs and plates. It's almost impossible to find studs that are straight enough for standard walls, let alone long walls. Until now. The FrameWorks® Wall System creates walls that are as true as a

chalk line, making remodelers' and builders' lives easier all over the house. Kitchens, bathrooms or any rooms that demand precision go up a great deal faster with the FrameWorks® Wall System.

Circle 32 on the reader inquiry card

For more information on the  
FrameWorks® Wall System, contact  
Steve Sellers (210) 614-3792



FrameWorks® and TimberStrand® are trademarks of Tim Joist MacMillan, A Limited Partnership,  
201 East Millard Drive, Denton, Texas 76205, 1-800-336-0515

NOW TWO CONVENIENTLY  
LOCATED STORES . . .

**MILLER**  
BLUEPRINT COMPANY NORTH  
10713 METRIC BLVD  
Austin, Texas  
(512) 837-8888



**MILLER**  
BLUEPRINT CO. DOWNTOWN  
501 WEST 6TH ST.  
Austin, Texas  
(512) 478-8793

... TO SERVE BETTER THE  
AUSTIN PROFESSIONAL!

Circle 13 on the reader inquiry card



Another repelling reason to use Typar® HouseWrap.



**Sure,** Typar HouseWrap does a great job of protecting your homes and crews from wet and damaging weather during construction. But Typar helps keep your homebuyers dry and comfortable, too. By covering construction gaps, cracks, leaks and holes left by joints and corners, Typar HouseWrap stops virtually all of the air movement in the wall cavity,

reducing drafts. The result: your homeowners save significant heating and cooling costs. What's more, Typar prevents damaging moisture buildup by allowing the house to "breathe" with just the right balance of moisture vapor transmission. So drywall and studs won't warp and rot.

Typar is unconditionally guaranteed to be more tear resistant, too, so it

works better on the job site. The cool gray color is easy on installers' eyes and looks great during construction.

Keep out moisture and keep on using Typar HouseWrap — for greater comfort, energy-savings and performance. For a free Typar brochure and product sample, call 800-321-6271.



E-mail: [dlahli@reemay.com](mailto:dlahli@reemay.com) • Website: [www.reemay.com](http://www.reemay.com) • Typar® is a registered trademark of Reemay, Inc. • © 1999 Reemay

Circle 106 on the reader inquiry card

WINDOWS  
CURTAIN WALLS  
ENTRANCES  
STOREFRONTS

Contact your local representative for these EFCO products.

## BGR Specialties

P.O. Box 16944  
Ft. Worth, Texas 76162-0944  
(817) 763-5831  
Fax (817) 731-0625  
[bgrspec@flash.net](mailto:bgrspec@flash.net)  
<http://www.efcocorp.com>

Congratulations to Midland Airport and Addison Circle, Phase 3. Thanks for using EFCO!

Circle 206 on the reader inquiry card

## From Concept To Completion

Your projects and your professional reputation demand the finest in product and supplier performance.

Cold Spring Granite is a company of people inspired to deliver both. We focus our expertise on your concerns to make sure your granite project is one that we can all be proud of - and one that will last.

202 South Third Avenue  
Cold Spring, MN 56320  
800-551-7502 320-685-3621  
Fax: 320-685-8490

Website: [www.coldspringgranite.com](http://www.coldspringgranite.com)  
e-mail: [csginfo@coldspringgranite.com](mailto:csginfo@coldspringgranite.com)

Your Representative:  
Robert Crownover  
830-598-6570

G R A N I T E



**COLD SPRING**  
Quarries and fabricators of building stone and memorialization products.

# Organic Office

**PROJECT** Frogdesign Digital Media Offices, Austin

**CLIENT** Frogdesign, Inc., Sunnyvale, Calif.

**ARCHITECT** Michael McDonough, New York

**ARCHITECT-OF-RECORD** TeamHaas Architects, Austin

**CONTRACTOR** Marcon Construction

**PHOTOGRAPHER** Nic Lebourg

1 Frogdesign's new office in downtown Austin is shaped to fit the industrial design firm's, high-tech and "green-tech" image. The quick-changing computer business dictated the 12,000-square-foot office layout. Architects designed the office for easy disassembly, so when computers or telephones are moved, recabling or reconfiguring can be done easily with a screwdriver and a simple materials list. Panels are joined with mechanical connectors and steel studs so reassembly or adjustments are simple.

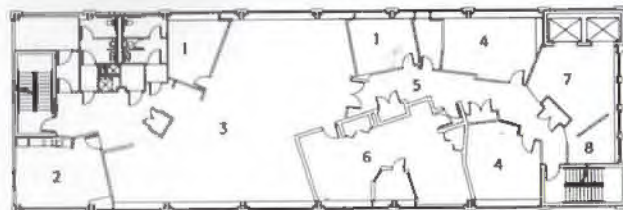
Materials for the office are all recycled or renewable. Partitions and ceilings are recycled newspaper panels, and dividers are biotech panels constructed of recycled wood fibers pressed into boards that resemble shredded wheat.

2 Walls and ceilings are leaning, skewed, or curved to express the theory that nonlinear patterns are the rule in nature and geometric shapes the exception. Architects built asymmetrical floor plans for their offices in Silicon Valley, Austin, and New York to create the sensation of continuity for the workers who commute between the three locations. The angled partitions are used as light baffles, bouncing and guiding light further into the floor design, for maximum assimilation of sunlight.



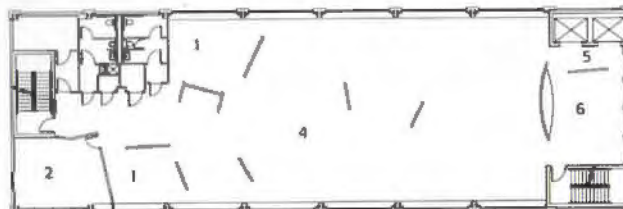
**LOWER LEVEL FLOOR PLAN**

- 1 OFFICE
- 2 RECREATION
- 3 OPEN OFFICE
- 4 CONFERENCE
- 5 HALL
- 6 A-V LAB
- 7 RECEPTION
- 8 STORAGE



**UPPER LEVEL FLOOR PLAN**

- 1 OFFICE ALCOVE
- 2 RECREATIONAL ROOM
- 3 OPEN OFFICE
- 4 HALL
- 5 CONFERENCE



# TEXASARCHITECT

## 2000 EDITORIAL CALENDAR

### Issue

### Editorial Focus

#### Jan/Feb

editorial  
deadline

Oct 4, 1999

ads close

Dec. 3, 1999

#### The Future of Architecture

This issue debuts the redesign of *Texas Architect* and looks ahead to the 21st Century by focusing on a new generation of young architects and the trends that will set the stage for the future.

**Portfolio: Schools:** This annual special section will feature the winners of the 1999 Texas Association of School Boards Design Awards Competition

#### Mar/Apr

editorial  
deadline

Nov 4, 1999

ads close

Feb. 3

#### The Border:

Five years after the implementation of NAFTA, *Texas Architect* spotlights one of the fastest growing and most culturally fertile regions in the U.S.

**Portfolio: Libraries**

**Interiors: Restaurants**

#### May/June

editorial  
deadline

Dec. 13, 1999

ads close

April 7

#### Architecture for Sport:

Sports are a growth industry in the 1990s, and Texas cities and universities have made huge investments in athletic facilities. *Texas Architect* scores the results.

**Portfolio: Health Care Facilities**

#### Jul/Aug

editorial  
deadline

February 14

ads close

June 2

#### Architecture for Animals:

The relationship between man and beast continues to evolve, and the built environment for animals reaches new levels of sophistication. *TA* will feature the best work by Texas architects.

**Portfolio: Office Buildings**

#### Sep/Oct

editorial  
deadline

May 5

ads close

August 4

#### 2000 TSA Design Award Winners:

The best design in Texas is the focus of this annual issue that sets the stage for the 61st TSA Annual Meeting and Design Ideas & Products Exposition.

#### Nov/Dec

editorial  
deadline

June 5

ads close

Oct 6

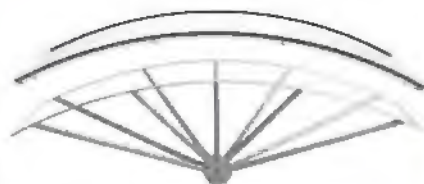
#### New Texas Houses:

Residential architecture is often the most heartfelt and innovative work that architects do. *Texas Architect* visits the best projects in the state.

**Portfolio: Sustainable Design**

**Interiors: Architectural Millwork**

**To submit work for publication:** mail images, a project description and other pertinent information to: John Davidson, *Texas Architect*, 816 Congress Ave., Suite 970, Austin, TX 78701. To have your submission returned, please include a self-addressed, stamped envelope. For more information, call 512/478-7386, or e-mail davidson@texasarchitect.org.



## think of it as an alphabet

### kaleidoscope

Want to create a new language for outdoor spaces? Kaleidoscope from Landscape Forms is the new, modular wall, canopy and seating system that lets you combine the individual pieces to make it anything you want it to be.

Call for more information and a catalog. What you do next is up to you.

Kaleidoscope is designed by Robert Chipman, ASLA; Brian Kane, IDSA; and Arno Yurk, AIA, IDSA. Kaleidoscope design is patent pending.



landscapeforms™

Diane Collier, Dallas Sales Office  
PH 888.667.1145 PH 214.343.1145  
FX 214.340.6769  
dianecol55@aol.com

# Green Goes Traditional

**PROJECT** McBride Residence, Spicewood

**CLIENT** Gail McBride

**ARCHITECT** Barley & Pfeiffer Architects, Austin

**CONTRACTOR** Katz Builders

**CONSULTANTS** Conrad Engineering (structural); Tom Randall (landscape)

**PHOTOGRAPHER** Imagz (Connie Moberly)

1 Barley & Pfeiffer Architects of Austin combined sustainable materials and traditional building techniques to create this 3,545-square-foot house overlooking Lake Travis. The house's most prominent feature is the cupola which creates a chimney effect by venting heat through windows placed high in the cupola. This creates a draw that pulls in cooler air from lower, ground floor windows. To enhance this traditional strategy for dealing with hot Texas summers, the architects added motor-operated upper windows in the cupola. The air conditioning system selected consists of three small condensing units (commonly used in commercial buildings) that use evaporation to cool the inside air. The separate units, coupled with corresponding programmable thermostats, give the owner temperature control over separate areas of the house, hence contributing to energy efficiency. The architects used recycled materials where possible. The result is a house that looks deceptively traditional, has low long-term utility costs, yet is open to the outdoors as the client requested.

2 To take maximum advantage of the prevailing lake breezes, the house is sited in a grove of shade trees with the largest windows facing southeast. Deep roof overhangs extend over double-paned windows to divert heat and provide additional shade. Insulation board and a self-venting radiant barrier system establish a thermal break between the metal roof and the upstairs rooms.



## RESOURCES

**Unit pavers:** Pavex/Holland Stone; **fountains, pools, and water displays:** Ocean Quest Pools; **stone:** Fergusson's Masonry; **limestone:** Leuders Accent; **glue-laminated timber:** Calcasieu Lumber; **architectural woodwork & doors:** Ian Fisher; **building insulation:** Wet Blown Cellulose; **metal roofing:** Tom Cook, Co.; **wood doors, frames & windows, plastic doors & frames:** Bill Zahn; **wood ceilings:** Texas Redwood; **paints:** Wizard Painting Company; **kitchen & bath cabinets:** Wilson Appliances



## Art Underfoot

**INTERIORS** One of the most remarkable features of the recently opened Austin-Bergstrom International Airport is the terrazzo in the main terminal and baggage claim area. Two murals are part of the terrazzo floor that encompasses 150,000 square feet, costing \$1.8 million and taking 35 full-time employees 15 months to install by hand. The murals are a map of the rivers of Texas, representing Austin's love of nature, and a map of Austin's downtown streets with their Spanish names reflecting the blending of Anglo and Mexican cultures.

The hand-crafted technique of terrazzo extends back to 15th-century Italy. Sculptors would shape marble outdoors and the chips would fall onto the terrace—hence the name terrazzo. Artists would collect the chips, mix them with cement and use them for flooring. The traditional blend of cement and marble is still widely used today. Additionally, architects and designers have the option to specify epoxy matrix terrazzo, which offers an even more unlimited color palette. Chips, also referred to as aggregates, are available in marble as well as granite, glass, and synthetic materials.

The project at Austin's airport used the traditional type of terrazzo, the same that was used in the recent extension of the Texas State Capitol Building. It consists of an equal blend of 1/4- to 3/8-inch marble chips and white cement. The cement and marble chips are custom-blended at the jobsite, and hand-troweled into the grid-like patterns on the structural slab.

The detail of the murals required a metal specialist to fabricate the letters and edges of rivers and streets. Because the adaptations of the original map were completed on CAD, the specialist was able to program a water jet, which uses high-pressure water to cut stainless-steel sheaths to precisely reproduce the designer's adaptations. When the metal outline of the design was completed, it was brought to the site in ten separate two-by-four-foot panels, welded together, and then placed into the mud-bed portion of the terrazzo system. The terrazzo colors were poured in place to complete the design element of the murals.

Because different colors of wet terrazzo laid next to each other will bleed together, each time a new color went into the design, it



photographs by Ray Don Tilley



1 map of downtown Austin with streets named after Texas rivers

2 the state of Texas with rivers in main concourse

"Art Underfoot," continued on page 30



# Which Finish is First for



# Prominent Architecture?

The first choice for important public buildings should be your first choice for commercial buildings, too. Terrazzo is one of history's enduring surfaces, an unparalleled value in design and construction. Durable, color permanent, and easy to maintain, terrazzo delivers creative excellence. As indoor air pollution concerns rise, Terrazzo is your safe bet, too, beating other popular flooring materials with low VOCs and resistance to buildup of airborne contaminants.

Project photos above:  
Texas State Capitol Restoration Expansion  
Dallas Convention Center Expansion  
Airline Bergstrom International Airport (full page)

The Best of Art *and* Technology

History

Durability

Ease of Maintenance

Value

Performance

Green Design

Versatility

Color

Artistry

Design

Creativity

Elegance

# Terrazzo

Southwest Terrazzo Association, Inc.  
Our Aim: Better Terrazzo for the Southwest!

P.O. Box 10018, Hackberry Station, San Antonio, TX 78240  
P.O. Box 45707, Exchange Park Station, Dallas, TX 75215

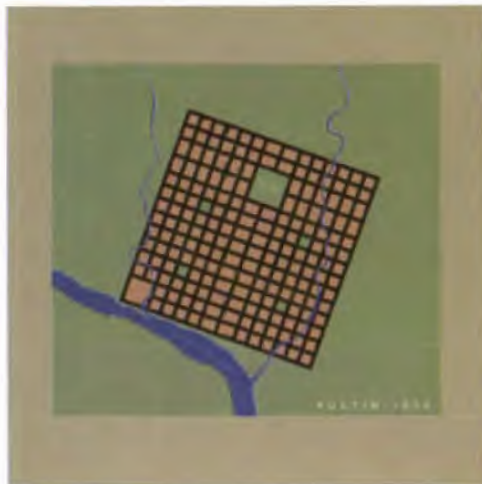
*"Art Underfoot," continued from page 28*

had to be given a day to set. An additional three to four days were required for the terrazzo to completely dry, then it was ground and polished. Grinding the terrazzo to trim the top 1/16 inch off the floor necessitates manually pushing a three-to four-hundred-pound machine across the surface.

Designers and airport officials chose to create the murals in terrazzo for reasons of durability, cost, texture, and visual relationship to other materials in the facility. They wanted the floor to be smooth, to minimize noise, and yet maintain a balance between materials elsewhere in the airport buildings. The technological advances that have increased the versatility of terrazzo gave the designers the latitude to create intricate artistic designs, blending and embedding the images that capture the spirit of Austin.

*Amy LaGrome*

artist's renderings for terrazzo murals



renderings courtesy Page Southland Page

## Lehigh White Cement Based Terrazzo Deep in the Heart of Texas



Texas Instruments  
Dallas, Texas

International Cultural Center  
Lubbock, Texas



White Cement Plant, Waco, TX



Pennsylvania Convention Center  
Philadelphia, PA

Visit us at AIA  
Expo 2000 -  
Booth #2107



Trinity University  
San Antonio, Texas



Georgetown High School, Georgetown, Texas



Korshak's, Dallas, Texas

# LEHIGH

Since 1897

Lehigh Portland Cement Company

1512 Lake Air Drive, Suite 105

Waco, Texas 76710-2973

Ph: (800) 331-7062 • Fax: (254) 776-1799

[www.lehighcement.com](http://www.lehighcement.com)



## Now Elvis has no reason to leave the building.

*Why should he? With Tyvek® HomeWrap™ he'll stay dry as a bone and keep cool during the dog days of summer.*

*That's because, unlike building paper and felt, Tyvek® HomeWrap™ has a unique, nonwoven fiber composition designed to help keep bulk water out. Tyvek® won't absorb water, so it won't expand or contract like building paper. And since it breathes, potentially damaging moisture vapor can escape, dramatically reducing the chance for wood rot, mold or mildew—not to mention costly callbacks that can damage your solid reputation.*

*What's more, Tyvek® HomeWrap™ is extremely durable, with twice the tear strength of building paper and felt.*

*Because it's pliable and lightweight, installation is fast and labor-efficient. Tyvek® HomeWrap™ can even help reduce homeowners' energy costs.*

*Finally, if you have any technical or installation questions, DuPont's national network of trained Tyvek® specialists are on call, when and where you need them. On site, if necessary:*

*So use Tyvek® HomeWrap™. And make every home you build fit for the King.*

*For more information call 1 800-44-TYVEK (1 800 448-9835).*



**Tyvek® HomeWrap™**



# This Work of Art is the Museum!

*Our limestone carves a plane  
where building meets sky  
in a permanent work of  
natural art in human hands.*



Providing quality natural stones  
for your next special project:

- Hadrian
- TexaStone Pink
- Permian Sea Coral
- Cedar Hill Cream

Specializing in quarry blocks,  
dimensional cut blocks, slabs,  
panels, cladding, balusters,  
columns, cobblestones,  
split-face, table tops, and tile.



TEXASTONE  
QUARRIES

P.O. Box 38 Garden City, TX 79739-0038  
915-354-2559 Fax 915-354-2559  
texastone@aol.com www.texastone.com

Circle 62 on the reader inquiry card

THE ANTIQUE  
MUSEUM OF FINE  
ARTS, IN THE VILLE  
D'ART DE LAUSANNE  
DE LAUSANNE





The story of the 20th Century is in large part the story of transportation. Our perceptions of speed and distance have been altered, and our world has become a different place. The demands of designing transportation infrastructure are complex and inspire some of the most interesting partnerships of engineering and architecture. Architecture responds to technology, creating places to celebrate the arrivals, departures, and transitions in our lives.



# Turn of the Century

by Susan Williamson

WHEN THE CITY OF AUSTIN hired Gensler of Houston and Page Southerland Page of Austin to design a passenger terminal for the Austin-Bergstrom International Airport, the City Council asked for a facility that was easy to use and that captured the character of Austin. The architectural team responded with a building that is thoughtfully and coherently organized, an open expanse of natural light and muted earth tones.

The 680,000-square-foot Barbara Jordan Passenger Terminal, built at a cost of \$130 million, is a long, shallow crescent with rectilinear wings extending at each end. The narrow plan reduces the distance from the curb to the most heavily used gates and allows a visual connection from ticket lobby through security checkpoints to the central gates.

The building's most striking feature is its openness. Virtually all of the airport's public operations are visible from the doors—ticket counters, gates, retail, and food services. Even the baggage claim area, so often hidden away at the end of a long hallway, is on display here; a large central atrium opens this grand lower-level space to view from the concourse. On the gate side, the building opens up even more, to a double-height wall of

1 Air-side elevation of terminal is one long, curving wall of glass; photo by Paul Barlaggy

2 Interior view of the concourse and marketplace.

3 Art by John Christensen



glass that fills the space with natural light and provides panoramic views of the sky and the outdoors. In this central area, the architects placed what they call the marketplace; a series of free-standing metal and glass pavilions that house food services and retail shops. This is the terminal's gathering spot, with cafe-like clusters of seating looking out on the main concourse and even a stage for live music.

A great deal of effort went into determining how the character of the city might be revealed. Working with a citizens' advisory committee, the architects decided that two traits were central—a love of the natural world and an emphasis on technology. Architect Lawrence W. Speck, FAIA, of Page Southerland Page and dean of the University of Texas School of Architecture, says the team was determined to render those values architecturally without resorting to cliché; he cites the openness to the outdoors and the use of natural materials as manifestations of one side of the equation. The simplicity of the plan and the crisp detailing, as well as such things as exposed

structural elements, are representations of the educated, analytical Austin mind that has fueled the technology boom, he says.

In terms of ease of use, the architects meet almost all expectations. The only exception is the long walk to some gates. The total number of gates was increased from 20 to 25 after the plan was developed, and the additional gates are located in an extension at the western end of the long terminal. The walk to those far gates is now almost as long a trek as to the farthest gates at the old airport. Moving sidewalks were considered but finally deemed unnecessary.

The goal of reflecting the character of the city proves more elusive. The subliminal architectural message is that Austin is a lively, open, and sophisticated city. And the new terminal is, indeed, all of those things. The marketplace is a mostly convincing approximation of Austin's hang-out culture, with local vendors represented rather than anonymous national concessionaires, and with Texas music on the sound system. The sweeping wall of glass provides a clear connection



3



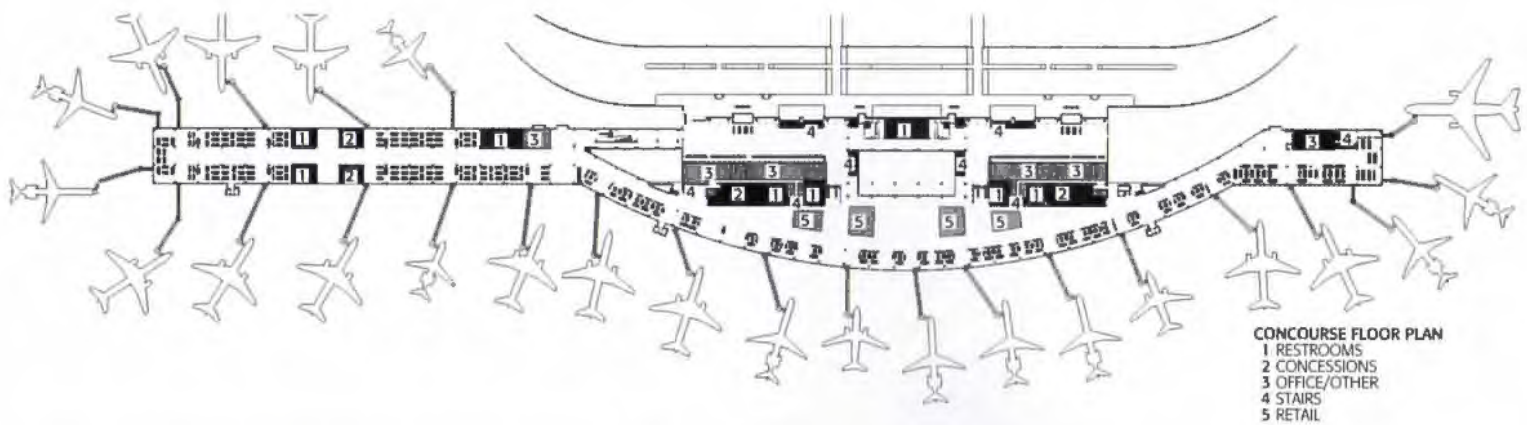
2

to the outdoors, while the concourse itself is a refined assemblage of metal panels in shades of gray interspersed with sections of sisal and fabric in earthy browns and others of golden wood. Terrazzo floors are patterned in rectilinear blocks, again in shades of gray with an occasional strip of green.

The result is a terminal that is sleek and efficient, but at the same time devoid of the quirky energy that has, for many, defined the city. At the heart of the problem are the carefully neutral and ordered interiors; the terminal spaces are refined to the point of blandness. A flood of natural light reveals the exposed system of roof trusses, cables, and connectors, but both the flat ceiling and the structural members are painted a uniform grayish cream. Texas pearl granite is used as an accent in several areas, as well as on a large wall in the baggage claim space, but the granite is so close in color to the terrazzo that it becomes just one more element of the monochrome scheme. The most colorful elements are murals above the ticket counters, particularly the scenes of neighborhood life by Fidencio Duran. Other artwork is, for the most part, clever and well executed although sometimes too subtle to compete in the large spaces. Wrought-iron hand railings by Austin architect and artisan Lars Stanley provide a welcome tactile warmth but are visually overwhelmed by the code-required glass and brushed metal guardrails.

Certainly, as Speck points out, Austin has long been an oasis for the educated. But it has also been a haven for the nonconformist, and the ferment, the clash of opinions, the warmth implicit in that culture is not represented in the new terminal. Or maybe the architects have gotten it





**CONCOURSE FLOOR PLAN**  
 1 RESTROOMS  
 2 CONCESSIONS  
 3 OFFICE/OTHER  
 4 STAIRS  
 5 RETAIL

right. Maybe the technology boom has rendered idiosyncrasy out-of-date. Perhaps this is the new Austin—cool and precise, ordered and sleek. Certainly the terminal serves its users admirably at a functional level and is a dramatic improvement aesthetically over the old. Maybe only those nostalgic for Austin's less well-ordered past (or at least for the myth of that past) will question whose city is reflected here.

TA

*Susan Williamson was editor of Texas Architect from 1997 to 1999.*

**PROJECT** Barbara Jordan Passenger Terminal Complex

**CLIENT** City of Austin

**ARCHITECT** Page Southerland Page, Austin (architect-of-record); Gensler, Houston (project design architect); Cotera Kollar & Negrete Architect (associated architect); Lawrence Speck, FAIA, Austin (project design architect & consultant)

**CONTRACTOR** Morganti Group

**CONSULTANTS** TCI-Landrum & Brown (aviation planners); Burns & McDonnell (associated engineers); Jaster-Quintanilla (structural engineers); Lozano Ortiz & Kent (associated engineers)

**PHOTOGRAPHER** John Linden; Paul Bardagjy where noted

**SELECTED FACILITY MATERIALS AND CONSULTANTS**

**Foundations:** MW Builders; **roofing:** Johns-Manville, Centria; **acoustical ceilings:** Decoustics, USG Interiors; **woodwork:** Quality Woodwork Interiors; **terrazzo:** National Terrazzo, Tile & Marble, Inc. /American Terrazzo Co.; **plastic laminate doors:** VT Industries; **toilet compartments:** Santana Products (J.M. Maly, Inc., distributor); **curtain walls:** Viracon; **soil testing:** Raba-Kistner Consultants; **construction materials testing:** HBC Engineering, Fugro South; **wall panel & column cover system:** Environmental Interiors; **geotechnical engineering:** Fugro South; **metal cladding:** Pohl, Inc.; **structural engineering:** Jaster-Quintanilla, P.E. Structural Consultants; **environmental service, remediation and demolition:** Law Engineering & Environmental Services; **metal ceilings and exterior soffits:** Hunter Douglas Architectural Products; **granite wall facing, stairs and floor trim:** Cold Spring Granite; **civil engineering:** Jaster-Quintanilla; **runway and drainage design, water control and environmental consulting:** PBS&J; **parking garage consultant:** Jose Guerra, Inc.; **countertops:** DuPont Corian

- 1 Frosted glass filters heat from Texas sunlight.
- 2 Land-side exterior is clad in metal panels with accents of Texas pearl granite.
- 3 Baggage claim area opens to both levels of terminal.
- 4 Murals by Fidencio Duran.



3



4



**PROJECT** Terminal Building, Midland International Airport, Midland

**CLIENT** City of Midland

**ARCHITECT** Parkhill Smith & Cooper, Inc., Lubbock (prime architects); Gensler, Denver (design architects)

**CONTRACTOR** MIW Builders

**CONSULTANTS** Parkhill, Smith & Cooper, Inc. (structural & civil), Agnew & Assoc. (mechanical & electrical), Kelly D. Cook (landscape)

**PHOTOGRAPHER** Richard Payne, FALA

#### RESOURCES

**Concrete pavement:** Transit-Mix; **unit pavers:** Pavestone Co.; **benches & litter receptacles:** Landscape Forms, Inc.; **concrete materials:** Transit Mix Concrete & Materials; **precast architectural concrete:** Southwest Prestressed Concrete; **masonry units:** Featherlite Building Products; **structural steel:** North Texas Steel Co., Inc.; **architectural metal work:** Artograb; **architectural millwork:** Fixture Concepts; **membrane roofing:** Firestone Building Products; **metal roofing:** Berbice Corporation; **fascia & soffit panels:** Alusinsse (Alucobond); **automatic revolving doors:** Entrematic; **glazed curtainwall:** EFCO Corp. (BGR Specialties distributor); **carpet:** Mannington; **acoustical ceilings:** Armstrong; **paints:** Sherwin Williams; **interior signage & graphics:** ArtoGraf; **controlled access system:** Matrix Systems of Ohio; **flight information displays:** Infax, Inc.; **energy management system controls:** Schindler Elevator Corp.; **gypsum board framing:** USG Interiors; **white cement:** Lehigh Portland

# Gates of the City

by Lawrence Connolly

FACED WITH THE CHARGE OF REPLACING a twice-remodeled air terminal built in 1951, the City of Midland looked to Gensler's airport group in Denver. The new \$35-million 185,000-square-foot Midland International Airport is straightforward, easy to understand, and manages to make the task of getting on an airplane or picking up a passenger a pleasant experience.

The Gensler architects used offset metal-skinned vaulted roofs throughout the project to recall the structure and material of airplane wings. The taller of the two offset vaults of the terminal has its fascia interrupted by three massive masonry towers that lean curbside and, according to the architects, recall oil derricks. The crisp corners of the towers are made possible by a unique custom-cut canted brick instead of corbeled common brick. The towers are not stylistic indulgences, but hide the facility's three large mechanical units and define the front doorways.

In the interior, a great atrium lobby makes interior signage almost unnecessary. The vaulted space's long sight lines allow one to immediately see how the building functions. At the center of the atrium, a vertical circulation element contains an elevator with see-through shaft, flanked by sym-



1 Covered area beneath the barrel vault is for taxis, hotel shuttle vans, and buses. To right is the canopy of the curbside porte cochere.

2 great atrium lobby with the leaning towers, ticket area, and the banded elevator shaft beyond

2

metrical pairs of parallel escalators and monumental stairs. The walls of this circulation structure are clad in alternating horizontal bands of limestone and polished marble which reference the core drilling samples that are so much a part of the region's oil field exploration. The airplane wing *parti* is repeated in the shape of the inverted arc-ribbed canopies that define specialized areas within the terminal and the concourse. The ceiling at the terminal level rises to 50 feet and at the concourse level up to 40 feet. Part of this volume is filled with the historic Pliska airplane (the first aircraft to be flown in the state of Texas), suspended from the roof structure in the baggage claim area. Clerestory windows in the offset of the vaulted roof wash the ceilings in an ethereal natural light from both the east and west. The white vaulted ceilings and structural truss system are unencumbered by any electrical lighting fixtures or air registers. Indirect lighting is provided in the atrium primarily by light troughs at the base of the vaults opposite the clerestory windows.

Part of the challenge of replacing the old terminal was the task of providing uninterrupted passenger service while the new one was being built. Locating the new terminal so close to the old, allowed most of the existing parking lots, runways, utilities, and tarmacs to be reused with only a few modifications. Two welcome additions to the parking areas include the new short-term parking canopy structures that are derived in form and materials from the terminal, and the new 500-foot long landscaped pedestrian boulevard that bisects these linear structures, linking

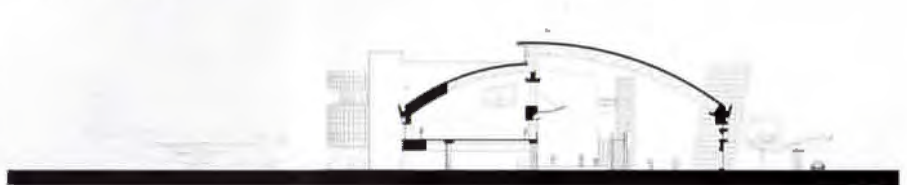
TERMINAL/ADMINISTRATION SECTION

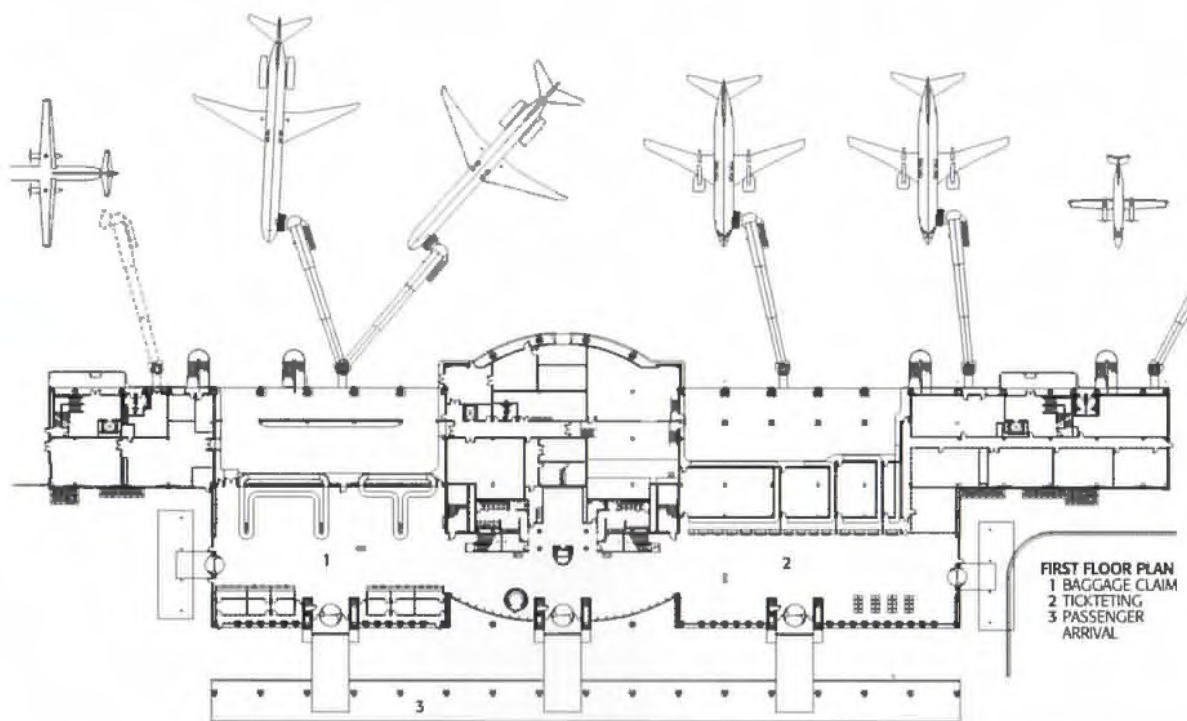


TERMINAL/CONCOURSE SECTION



CONCOURSE SECTION

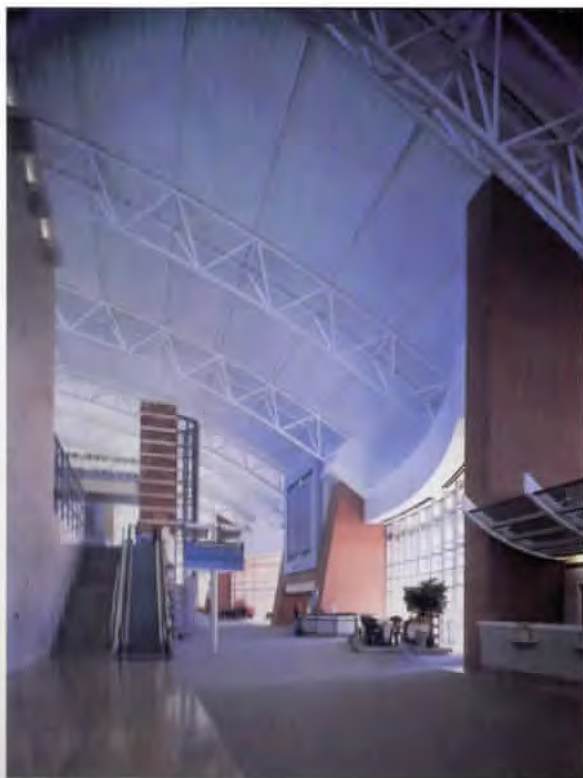




1 the north pair of parallel monumental stairs and escalators in the lobby

3 canopy of the covered walkway leading to the porte cochere

2 polished limestone and marble circulation core with the elevator's transparent shaft opposite the central tower and its perforated screen



1



2

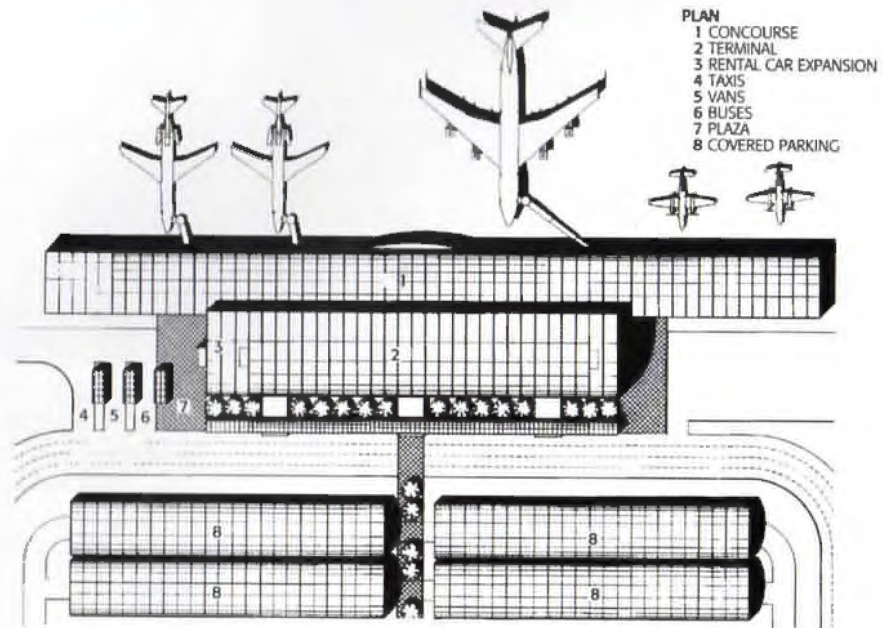


3  
 the main terminal entrance to the long-term parking lot. This boulevard is supplemented by two shorter walkways: one for the ticketing area and the other for the rental car and baggage claim areas. The six-lane-wide and 600-foot-long curbside provides ample passenger loading and unloading capacity even when all three entrances are in heavy use.

Midland's terminal is a refreshing design for a small hub airport, but it also represents a trend in large-scale projects; the facility can be expanded without increasing roof area. A second floor can be provided over the ticket and baggage claim areas when needed. The linear configuration of the terminal also allows for expansion of up to eight additional gates. This new user-friendly airport insured that it will continue to work well in the future if, and when, the Permian Basin's commercial air travel needs increase.

**TA**

*Lawrence Connolly is an architect practicing in Midland.*





# River Station

by Lisa Germany

ALL THE LINES—red, blue, yellow, purple and brown—of San Antonio's little fleet of rubber-wheeled trolleys lead to the Riverwalk Streetcar Station. This stop in front of the convention center happens to be about a half a block away from the Alamo and right above the place where the Riverwalk branches out and leads either to the convention center or the River City Mall. What distinguishes this particular streetcar station is not simply that it makes San Antonio's historic central business district accessible from distant points of the city, but that it provides a gracious connection to the Riverwalk. At this hub of pedestrian traffic, the streetcar stop, outfitted with an elevator and a spiraling staircase, smoothly brings together the city's famous split levels.

The City of San Antonio and VIA Metropolitan Transit jointly arrived at the idea of a street car station that would also be vertically connected to the river, and they agreed to share the project's \$1.5 million construction cost. Because the architect's job would be high profile and possibly controversial (every move made in the historic core of San Antonio is closely scrutinized), they advertised the job widely and carefully interviewed finalists. When the final votes were counted, local firm Beaty Saunders Architects, Inc., which is also heading up the Riverwalk Access Master Plan, had the job. "We had generated sketches of what it might be like," remembers city architect Bill Hensley about the firm's first design, "But Mike [Beaty] came up with something so much better than we imagined. He redesigned the whole convention plaza."

"We took everything on the plaza off," says Beaty, "so we had a clean palette." The removal of old lamp posts, signs, and street furniture gave the firm a chance to observe the way the site was used. They knew they would need to accommodate streetcar stops on each of four sides of the busy plaza, but the unencumbered site also allowed them to see the way people meander from one side to the other. Wanting to respect the natural, easy quality of pedestrian traffic, they decided to shape spaces with simple, limestone columns that moved along the plaza in a serpentine fashion. While thus keeping the flow of people loose and ambling, the curving lines also referenced the current of the river below.

With a desire to keep every addition simple, the columns were outfitted with lights that smoothly extended their heights with cube-like and sand-blasted glass. Canopies to shade patrons cantilever out from the columns, and steel beams designed by Beaty subtly tie the structure together. Artwork in the form of colorful tiles by San Antonio artist Ann Adams were also worked into the four sides of each column.

Beaty's light touch on the plaza kept the station from impeding views of the historic city, but that was only part of his assignment. The job of connecting the station to the Riverwalk with a staircase and an elevator turned out to have a multitude of hidden difficulties. Beaty knew that he would have to abut his structure against a historic bridge, but he did not expect to encounter a 36-inch sewer line and a 30-foot-wide siphon vault. Nor could he have anticipated that a huge storm sewer discharge would hem him in still further. Ultimately, the sewage line was moved; Beaty Saunders redesigned the siphon vault and hid it inside the curvilinear form of the elevator, and then, somewhat miraculously, wedged the entire structure between

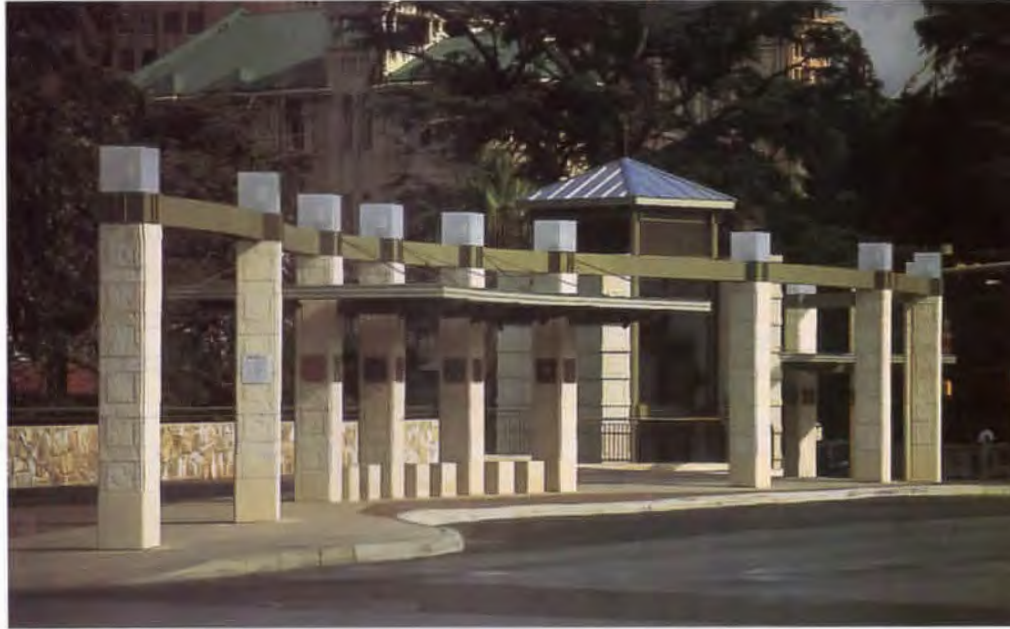
**PROJECT** Riverwalk Streetcar Station, San Antonio  
**CLIENT** City of San Antonio and VIA Metropolitan Transit  
**ARCHITECT** Beaty Saunders  
**CONTRACTOR** Winters Construction Co.  
**CONSULTANTS** Danysh & Associates, Inc. (structural); Fernandez, Frazier & White, Inc. (civil & landscape); Barron Engineering (mechanical & electrical); Ann Adams (artist)  
**PHOTOGRAPHER** Don Seidel and Terry Palmer

## RESOURCES

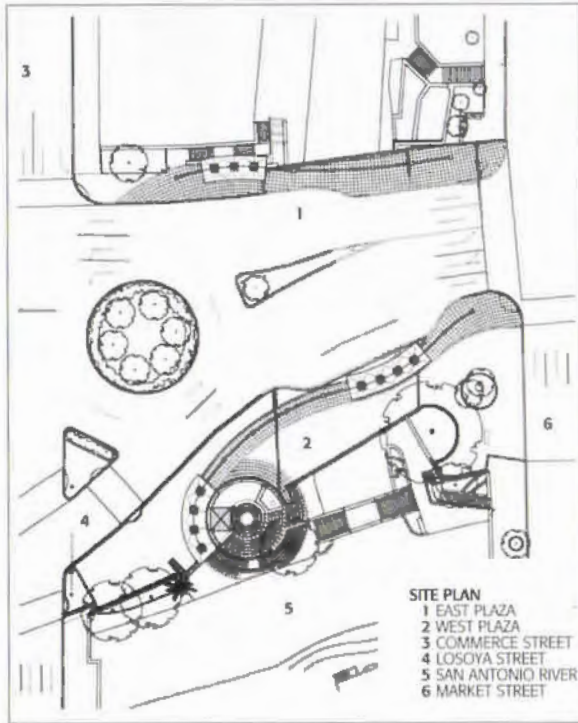
**Limestone, concrete pavement:** Ingram Ready-Mix; **retaining walls:** Ingram Ready-Mix, Sheplers Concrete Products; **concrete materials:** Sheplers Concrete Products; **limestone & cast stone:** Pyramid Stone; **metal materials & architectural metal work:** Metal Tech; **railings & handrails:** Julius Blum for Bronze Rails



2



3



the storm sewer discharge and the bridge.

When the project was finished just before Fiesta began this year, it was widely proclaimed a success. Bill Hensley, who is particularly thrilled with the station says he really likes the intermodal aspect of it. "You can be a pedestrian, you can pick up a street car going any direction or you can go down to the river and ride a boat," he says. **TA**



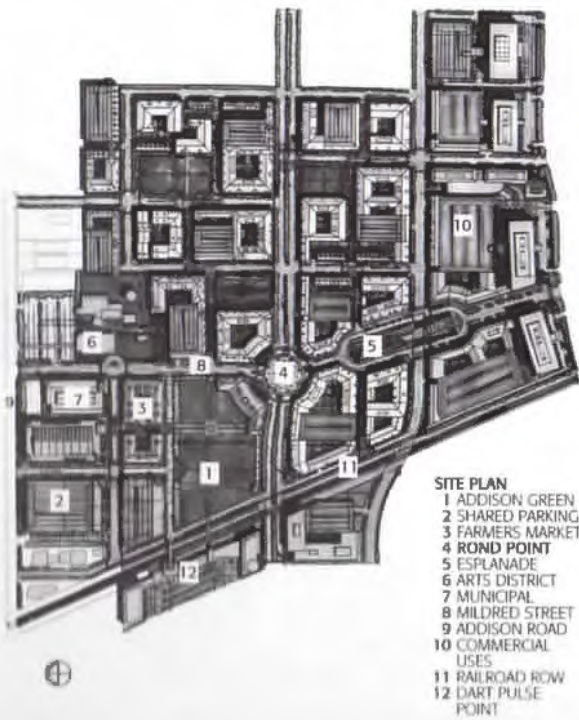
4

1 Spiraling staircase lightens the mass of the elevator it encircles.

2 Sandblasted cube lights on columns are unobtrusive by day, luminous by night.

3 The station from Convention Plaza, the busiest pedestrian intersection in the city.

4 The station smoothly connects the two levels of San Antonio's downtown.



# Discovering the Street

by Willis Winters

AS THE EPICENTER OF BOTH SUBURBAN sprawl and uninspired freeway architecture, Addison, Texas is the unlikely site for an enlightened public/private mixed-use development based upon “new urbanism” planning principles. Nonetheless, this small suburban community is home to Addison Circle, a planned, high-density urban neighborhood currently in its third phase of construction. The 80-acre development is sandwiched between the Dallas North Tollway and the Addison Airport, its southern boundary defined by a proposed DART rail alignment that will extend to the Dallas/Fort Worth International Airport. As an interim measure, DART recently completed a bus transfer station adjacent to Addison Circle on the future rail station site. This DART project represents a rare case of a station being built in response to high density development rather than, as is historically the case, development following rail.

The development of dense residential or mixed-use projects adjacent to light rail is a recent phenomenon in Dallas, but several other major projects are currently under construction. A \$150 million loft and retail development is being built near the Cedars station south of downtown, and on the north end of the DART line, two major projects have mushroomed to envelope the Mocking-



bird Lane station. Like Addison Circle, these projects are located close enough to adjacent light rail that daily vehicular trips by residents could be significantly reduced: good news for a city choked by poor air quality and traffic congestion.

As Addison Circle currently takes shape on the flat, featureless expanse of the North Dallas prairie, it incorporates a pedestrian-friendly, hierarchical street network serving an interior mixed-use district of up to 4,000 residential units. The second major component of the land-use plan is a high-density, primarily commercial, mixed-use zone located along the development's eastern edge, parallel to the Dallas North Tollway. This area is planned to encompass up to four million square feet of office, residential, hotel, and retail space, creating a potential employment base of 10,000 jobs. These jobs would be only a short, potentially pleasant stroll (one block) from the nearby residential district.

To date, the first two phases of development are complete, with a population of 1,500 residing in both apartments and townhouses. RTKL has designed all the mixed-use residential buildings for the project, including those currently under construction in phase III, and those planned for phase IV. These residential units are generally full-block buildings with interior courtyards and parking garages, tapering down in height from seven floors adjacent to the tollway commercial district to an average height of four floors at the project's center. They are designed to overlook the public streets and parks with front doors, balconies, and porches, instilling in the process a self-policing street life. When all of these elements are considered alongside Addison Circle's other urban attributes, including population density and diversity of primary uses, even urban critic Jane Jacobs might approve.

Architecturally, the mid-rise residential blocks are "background" buildings of indeterminate stylistic provenance; their true significance lies in the urban form they create—splendidly-proportioned public spaces connected by pleasant, pedestrian-friendly streets. These elements are based upon fairly reputable urban prototypes, Commonwealth Avenue in Boston's Back Bay, and John Wood the Younger's monumental Royal Circus in Bath, England.

While it is too early to draw conclusions about Addison Circle, the early signs are encouraging. The residential component is fully leased and the retail is doing well (no closures). With the imminent completion of nearby employment nodes only one block away, one critical question remains—can Addison Circle discover the street?

*Willis Winters is assistant director of the City of Dallas Park and Recreation Department.*



2

1 Residential, full-block buildings are built around interior courtyards and parking garages.

2 Front doors, porches, and balconies make the streets self-policing.

3 Buildings are arranged to create urban spaces that encourage pedestrianism.



3

**PROJECT** Addison Circle, Addison  
**CLIENT** Post Properties, Inc., Dallas  
**ARCHITECT** RTKL Associates, Inc., Dallas  
**CONTRACTOR** Post Properties, Inc.  
**CONSULTANTS** Brockett Davis Drake, Inc. (structural);  
 Basharkhab Engineering (m.e.p.); Huitt Zollars (civil  
 engineering, landscaping); Theo Kondos Associates (lighting);  
 Jenkins and Gilbrest (zoning); DeShazo, Sharek, & Tang, Inc.  
 (parking analysis); Fugro South (geotechnical engineering,  
 construction materials testing)  
**PHOTOGRAPHER** Craig Blackmon; RTKL/Dave Whitcomp

#### RESOURCES

**concrete roof tile:** Monier, Lifetile; **composition shingles:**  
 Tamko; **roofing systems:** Berridge; **brick:** Glen Gery; **stucco**  
**system:** MagnaWall; **EIFS:** TEIFS; **windows:** Marvin  
 Windows, Skotty Windows; **aluminum storefront systems:**  
 EFCO Corp. (BGR Specialists, distributor)

# Collaboration by Design

How a team of architects built the last major U.S. airport of the millenium

AIRPORTS ARE THE QUINTESSENTIAL 20th Century building form, an architectural expression of movement and change. From the very beginning, they have presented architects with the daunting task of keeping pace with a rapidly evolving technology. The requirements for airports not only change rapidly, but airports change the world around them. Because they attract development on their peripheries, they have been compared to lakes which eventually silt in and vanish—the Robert B. Mueller Airport in Austin is a case in point. No one in the 1950s anticipated how dramatically the advent of the jet age would rewrite the rules for terminals in the '60s. No one anticipated how accessible air travel would be at the end of the century.

In designing an airport, architects not only have to meet complex demands of technology, they have to satisfy the demands of municipalities, airlines, and the Federal Aviation Administration. Airport design is one of the most complex and collaborative challenges an architect can face. To understand the process, *Texas Architect* spoke to three architects who collaborated on the new Austin-Bergstrom International Airport. Gary Blankenship is a vice president at Landrum & Brown in Los Angeles who specializes in planning and conceptualizing air terminals. Ron Steinert is the vice president in charge of the airport practice at Gensler. Lawrence W. Speck, FAIA, is a principal at Page Southerland Page of Austin and dean of the University of Texas School of Architecture.

## Gary Blankenship

**TA: How many terminals have you planned?**

**GB:** I'm going to just estimate, probably somewhere between 50 and 100. Typically, many studies are done before a terminal is built, and there may be several different studies for one terminal. Before we ever knew the Bergstrom site would be available, we were studying the Manor site with PSP, and there was a very different terminal arrangement conceived. So when I talk about terminals that I worked on, I'm talking about the studies and the real projects.

**TA: You've been planning airports for Austin for how long?**

**GB:** I think we started out in 1987. At one point, I basically moved down to Austin. They had some of the Air Force facilities that were only a couple of years old, and I was put into an enormous room which had no windows. It was full of wall space. I work by hand because it's much faster, and it can be more colorful and interesting. You can respond more quickly to the team's ideas, draw the bad things along with the good things, and have a look at everything. Before we got very far, the walls were just covered with sketches. So we really try to examine every possible opportunity that might be there.

**TA: How long does this part of the process take?**

**GB:** The planning studies are very front-end, and they typically last six months. Some last much longer.

**TA: When you started the Austin-Bergstrom project, who was on the team at that point?**

**GB:** There were various engineering firms that were part of the process from the very beginning. Of course in the very beginning it was Matt Kreisle and Ron Steinert from Gensler. Matt was PSP of course and Chuck Tilley from PSP. The way these studies work, I will take the lead for the conceptual work. The drawings will all be ones that I do, with everybody looking over my shoulder for that initial phase. And then when we get to the point where we have confirmed a recommended alternative with everyone, including, most especially, the client, then it begins to shift into more of a schematic design and that was taken over by Gensler. They begin to develop the architectural statement, the space through the floor into baggage claim and things which give it a character. Then, as it phases out of schematics, it begins to move through design development. PSP picked it up and took it forward through completion. It's almost like a symphony where the movements rise and fall and sequence in and out of each other. It's like an art form. I just like it so much because it isn't a cut and dried thing, it's always changing.

**TA: What are some of the more critical factors in the process from your point of view?**

**GB:** The key in successful projects is achieving a balance between the terminal and its land and air-side capacities. The aircraft gates and air-side



Gary Blankenship



Ron Steinert



Lawrence Speck, FAIA

capacity are always the driver in projects like this, because if the aircraft can't get in and out with passengers, then there's no need to do anything else.

**TA:** As I recall, you came up with 18 different configurations?

**GB:** They're not totally separate concepts. There really aren't that many different concepts for terminals. There are probably four different ones, but these were variations on the theme. It's an evolutionary process. I can't remember which one we chose, it was way down the line, though. I think it might have been number fifteen.

**TA:** So it's not as if you come up with the 18 and then choose one. You work through.

**GB:** In the case of Austin, we developed a very simple matrix. We listed the alternatives along the top by number, and then down the side we had evaluation criteria and definitions of those criteria which were grouped into air-side, terminal, land-side, and I believe, cost considerations. From that we short-listed three alternatives and blew those plans up to a larger scale and showed how they would work internally. We drew up sections, we measured walking distances and the kind of objective criteria that we could know about at that point. And then we went through a second evaluation which resulted in the recommended alternative.

**TA:** Did the fact that this had been an Air Force base present any particular problems or make it different?

**GB:** I'm not sure that it was different from a regular airport that has infrastructure you've got to work around. There was a munitions dump down to the south, but that didn't really have too much to do with the terminal.

**TA:** Do you stay involved throughout the life of the project or, once they go into schematics and design development, do you move on to another project?

**GB:** I like to stay with it all the way through. I think that's the proper thing to do. The role does taper off, however, and that's just a fact of life.

**TA:** I understand that the City of Austin requested that this be adaptable for the next 50 years.

**GB:** Yes, that was fascinating. And we did look at it, using what we know today about aircraft. But it would be like somebody in 1954 telling us what we need today, and the airline and aviation industry changes so much that it's almost impossible to know. I think the key was to engineer and design as much flexibility into the plan as you possibly can, and that means keeping elements that can't be moved or easily changed away from elements that are likely to change. Don't put your mechanical rooms and toilets on the perimeter of the building if you can possibly avoid it because aircraft need to shift up and down the face.

**TA:** Did the plan for the baggage claim area come in schematics or conceptual planning?

**GB:** We had that very early and it was the second time that we used it. The first time was at the John Wayne Terminal in Orange County.

But there was a real concern about reflecting the character

of Austin, and there were lots of different ideas about that. Of course, I wasn't involved in the later choice of materials and colors and things like that. From the very beginning, there was great concern that this would be the gateway to the city, and it needed to be something that really reflected it. Austin didn't want to do business as usual, they wanted something special, and I hope they got it.

## Ron Steinert

**TA:** Is Gensler's airport practice spread out over the country or is it primarily in California?

**RS:** We have four offices that are our regional airport practice areas. Here in Santa Monica of course, and then a Denver office, Houston, and Washington D.C. All currently have active airport projects.

**TA:** And the Austin project was done out of which office?

**RS:** It was basically a Houston office project. Although the way we work, we use our best people who are available, regardless of where they live, so even though it was a Houston project, it was staffed primarily with LA people.

**TA:** How many airports does Gensler do a year?

**RS:** It obviously depends because these projects are so long in duration. Each lasts about five years; but since 1985, we've designed over thirty terminals.

**TA:** How did Gensler assemble the team?

**RS:** Airport projects are maybe "unique" in terms of architectural projects. Perhaps 80 to 85 percent of our projects come from repeat clients and relationships. Airport projects are all in the public sector, and once you begin to know that a project is coming, and usually that's anywhere from a year to six months before the request for proposals comes out on the street, you look to form teams. Austin, of course, is probably one of the more difficult cities to work in because the city required that roughly 75 percent of the total work be based in Austin. We had a long standing relationship with Gary. In fact, we've worked on about eight or nine different terminal projects together. When this project became visible, he suggested that we join the PSP team. So we brought the airport design expertise to the PSP team, and then PSP brought



Model of Austin-Bergstrom International Airport

Images of models courtesy Page Southerland Page

Larry Speck into the project, and his role was to ensure that the initial design was appropriate for Austin. We had a team of about six people that lived in Austin for just about a year. During that time, we led the design of the facility, and Larry came in and consulted. You look for a team that has a local presence, has local capabilities, and then you get the best people for the best things in the right spots.

**TA: So there were six Gensler designers in Austin. Were they involved throughout?**

**RS:** We were involved in the planning side of it with Gary. We were involved in schematic design and design development. During that time, one of our designers, Cap Mallick, led a multi-firm design team. We had a very large space in the PSP office, and we had people from PSP, from Juan Cotera's office, and our people. But in essence we were responsible for turning the planning document into a real building. So it was a very collaborative effort. I think at the peak the team was made up of 15 or 16 people from the four firms.

**TA: Other than the teaming requirements, did Austin present any other particular problems or challenges?**

**RS:** For one, we were asked to project what this airport might be 50 years down the road and make sure that whatever we did on opening day, would allow the terminal to grow. Can you imagine in 1950 trying to design a terminal that would be appropriate today? But the advantage of doing that became apparent during the construction of the terminal when the airlines and the airport determined that there was a need for five more gates.

**TA: During the process of building?**

**RS:** Correct, and because we had already gone there in the planning phase, we knew exactly how to do it, and it was pretty much complete by the time the airport opened.

**TA: This is not a hub airport, it's a destination airport. How much does this kind of airport differ around the country? How much can an airport like this reflect a particular place?**

**RS:** You would think an O&D (origin and destination) airport is an O&D airport. But each city, each community has unique requirements. One of the requirements Austin had for this facility was that it be a "green" facility. We try to be conscious of that in all of our terminals, but not to the same extent that this one was. This was a benchmark.

**TA: What were some of those things that made it sustainable?**

**RS:** We had motion sensors for lighting systems and multiple zones for air conditioning, so you only cool those areas that need to be cooled. We used materials that don't off-gas. The carpeting, the glues and the wall finishings were not toxic at all. All the systems were highly energy efficient, and the materials were basically recyclable. That was a very conscious effort. Every community wants their terminal to be distinctive, for the passenger to instantly realize they've arrived in a particular city. This is a real challenge for the designers. One of the nice things we did in Austin is that you can stand above the baggage claim and look out through the windows in the

front of the building to the skyline of the city. If the terminal had been designed more enclosed, that tie wouldn't be as strong.

**TA: Do you think it takes citizens in a city a while to appreciate a new airport?**

**RS:** The subtleties of the design and the subtleties of the designer's intent will take a while, but, in terms of function, I believe that the users of the terminal understood the improvement over Mueller airport instantly.

**TA: Austin aside, what are the great airports or airports in the United States?**

**RS:** If you were looking at them as purely architecture, I think your selection would be different than if you are looking at them in terms of functionality. Cincinnati is probably one of the most successful terminals, as a hub. But if you are looking strictly at architecture, obviously Helmut Jahn's facility in Chicago at O'Hare and Eero Saarinen's at Dulles Airport are brilliant examples of architecture, but they aren't necessarily the best airports to get around in. I think Austin will be deemed a successful airport. In terms of how it reflects the community and functionally, it is very much a success.

### Lawrence Speck, FAIA

**TA: You were involved from the beginning. What was your focus at that point?**

**LS:** Well, Gary was generating all these different configurations. At that point, I was interested in what kind of space it was going to be. So we came up with this option that seemed to have great spatial possibilities to me.

**TA: How so?**

**LS:** Well that long curve was going to give a central focus, as opposed to one of the more linear configurations.

**TA: Had you worked on an airport before?**

**LS:** No.

**TA: Was it just another design problem or did you have to go out and educate yourself about airports in a different way?**

**LS:** I did go to lots and lots of airports. But my personal belief is that we often put way too much stock in whether somebody's done fifteen of these things before. I had never done a convention center, but I did the Austin Convention Center. Never did an airport, I did the airport. I have huge admiration for those multi-building-type firms which are the ones generally we admire—Ford Powell & Carson, I.M. Pei. I think there's a freshness that comes from doing many different building types, and you get to learn some lessons about one building type by doing another building type.

**TA: There was a great deal of emphasis on using the terminal to establish or confirm Austin's civic identity.**

**LS:** That's true. The mayor and city council really came at this airport as an identity for Austin. So this wasn't just the architects. The council formed a committee to work with us, to try to give this as much character of Austin as possible. So it was an investment the council made.

**TA: What did you do to capture the spirit of Austin?**

**LS:** The consensus was what we didn't want was a kind of billboard for Austin that said in a cheap way "Y'all come," or "Here's who we are." The idea was to penetrate a little deeper and see what is the soul of the city. And we came up with several things that I thought were just wonderful observations. One was the whole reverence for nature and the natural environment. The worst thing about many airports is the sense of enclosure. We wanted a space big enough that you don't feel contained. And there are all kinds of things about nature—local materials, granite from the area—that were a tie into nature. Another thing was the Austin lifestyle, not in the clichéd sense, but the idea of it being a friendly place, an easy relaxed place. That's the real Austin.

The third thing this committee came up with was the notion that we're also about technology. We have a long standing history as an intellectual community, a community that thinks. So the airport needed to have this kind of clarity and intelligence all the way down to how it's made, how the pieces go together. In addition there are all kinds specific signals of Austin, especially in the craft and art part of the project. And this was also very interesting, seeing what can architecture carry and what can art carry. What messages can be specific, and what messages had to be more abstract?

**TA:** I understand light in the airport was approached as a design element.

**LS:** It was a risky situation because we were doing things you don't normally do in Texas with light, in part because we can do it now. There's now glass that lets in light but very little heat. We had three different kinds of glass. It's really been those advances in glass technology that enabled us to use so much daylight. It's very interesting. Daylight gives you more lumens per unit of heat than artificial light. Because an airport is internally lit you're concerned about the heat that is generated by bodies, by the lighting system, by the machines that are operating there. We did a lot of testing, but in the end, I was very pleased about the fact that we opened during the summer, and we were able to reduce our cooling because we didn't have to compensate for all that electrical light.

**TA:** How would you compare this turn-of-the century airport to train stations built at the turn of the last century?

**LS:** The huge change in airports is that they're for everybody now. They've become a public building in a different way and are much more like train stations were a century ago. I think there's great potential we haven't explored yet. Train stations were not just a place to get on a train but were places where you just hung out. That's where hotels and restaurants were. That may happen with airports in the future. There may be a way to connect with the rest of the city in a much more positive way.

**TA:** The parking lots of this airport are vast. One doesn't really see the terminal as you approach in a car.

**LS:** The parking lots are in a great location in terms of drivers arriving at the airport, looking for parking. And then there is, of course, a lot of landscaping to come, a hell of a lot of landscaping to come. Eventually I don't think it will feel so much

like you're approaching a parking garage. But we knew from the very beginning that that's not how people experience an airport. Anybody who designs an airport and thinks that someone is going to be standing out front and saying "Oh what a great airport!" is delusional. At an airport, you're getting out of your taxi, you're trying to figure out which airline you're going to, you're gathering your bags. The real experience of an airport is inside. You don't approach an airport the



way you approach the Capitol or a nice office building. It's a totally different experience.

Interior of model for Austin terminal

**TA:** You've done very large projects and you've done small. As a designer which do you prefer?

**LS:** Even when I work on a small project, I don't make all the decisions myself. The client, the contractor—there's always somebody else that is part of it. I can't say I like one better than the other. I really like the change between them. The down side of a big project like the airport is that there's no immediate gratification. It takes a lot of patience. You're thinking of something now, and it's going to be five years before that comes out. Or you're four and a half years down the line, and you're trying to remember, what were we thinking? So it takes a lot more patience and a lot more grand comprehension of where we're going and what we're doing to keep ourselves on track.

You know, I've never sat down until very recently and even analyzed what happened in the collaboration. It just didn't dawn on me to focus on that. Lately, I feel like pretty much everything I do is a collaboration. Whatever I do always involves a lot of people, and I love that too. With my colleagues at the university, I'm learning from them all the time. And doing the convention center, it seemed very much the same kind of thing. Everybody is smart, and everybody is growing. **TA**

## Industry News: Products for Sustainable Design

AFM R-Control Building Systems and their Texas partner plant, Therma Foam, Inc.



of Fort. Worth, have announced that R-Control Insulated Panels (SIPs) were recently recognized by the Texas Department of Insurance (TDI) as an acceptable method of construction in

the Class IV high wind areas of Texas.

R-Control SIPs have been accepted and listed in Product Evaluation Report # FR02 from the TDI as investigated for wind de-

sign. For a copy of the report, contact Therma Foam, Inc., or visit the TDI web site at: [www.tdi.state.tx.us](http://www.tdi.state.tx.us). Click on "Windstorm," then on "Product Index/Product Evaluations" in the documents box.

TDI policies require plans for affected structures to be examined and approved by a Texas Professional Engineer. Construction Detail Books and Load Design Charts are available from Therma Foam, Inc. or may be downloaded from the AFM web site at [www.r-control.com](http://www.r-control.com). R-Control SIPs have been thoroughly tested for structural, fire, thermal, sound, durability, and insect resistance. They can be professionally designed to replace conventional framing in walls, roofs and floors of residential and light-commercial projects.

Carrier Corporation has released the Comfort Heat Pump System that uses the non-ozone-depleting refrigerant Puron. This new system is built specifically for long-term environmental friendliness



and features an upgraded variable speed coil fan, a heat pump, and one control panel for both temperature and humidity.

The goal of the Comfort Heat Pump System is to maximize energy efficiency, provide consistent household temperature and improve indoor air quality. The Thermidistat Control, which takes the place of conventional thermostats and humidistats, and the low-noise heat pump that uses chlorine-free Puron contribute most to the pump's energy efficiency.

As part of the federal initiative Partnership for Advancing Technology in Housing (PATH), Carrier Corporation participated in building and designing a model home that would use the most affordable and energy efficient products. Most of the products used to build the house were market-ready but not widely known. Combining the Comfort Heat Pump System with high-performance windows, home wiring, ducts, insulation and solar water heating, the model home in Simi Valley, California, was able to trim 35 percent off energy costs, compared to traditional building practices. This is the third year Carrier has promoted environmentally-sound technologies by participating in PATH. Carrier supplied three Weathermate furnaces to a previous model home built on the Pine Ridge Indian Reservation in South Dakota.

*TA Present, TA Past.*  
Coming in 2000.

**ta<sup>50</sup>**  
Texas Architect at Fifty

**WEATHER SHIELD**  
WINDOWS & DOORS



6440 Norway, Dallas  
designed by Fusch Serold & Partners, Inc.  
constructed by Curt Welwood Homes

## DON'T GET STUCK

Parched Dallas droughts. Hot, humid Houston summers. Punishing San Antonio storms. Tough weather requires tough windows. Only Weather Shield craftsmen could combine the graceful lines of 7/8 inch muntin bars, the historic beauty of individual lites and the energy efficiency of insulating glass. Other companies have

## WITH IMITATION

boasted of divided lite windows, but for them, it's really a false front. Most merely adhere a wood grill to their glass and pass it off as TDL. The danger is the adhesive may cause stress fractures in the glass, or the grill may pop off. Weather Shield offers true divided lites along with truly superior craftsmanship. We carefully detail

## TRUE DIVIDED LITES.

each and every TDL window and door to provide the same look and feel of early American architecture. We also offer TDL across our wide line of styles and shapes — as well as in our True Oak™, Cherrywood™ and pine options. Choose the TDL that shares a bond with architectural history, rather than a bond with adhesives.

THERE'S MORE TO SEE IN A WEATHER SHIELD WINDOW.

Circle 33 on the reader inquiry card

*"This traditional residence is just one of many speculative projects we have designed for Curt Welwood. With the larger window panes, wall dormers, and dormer windows provided by Weather Shield, we were able to stick with standard sizes and specifications while still achieving a traditional style."*

— Lloyd Lumpkins, Principal Designer  
Fusch Serold & Partners, Inc., Dallas

*"Since 1961, Curt Welwood Homes has been building luxury homes in the Dallas area. Quality, personal service, and integrity are the cornerstones of our reputation. Every detail, including Weather Shield windows and doors, is examined and measured against high standards to ensure the best results."*

— Curt Welwood



425 Airline Dr. Coppell, Tx. 75019  
972-304-1234 Fax 972-471-1311

# Don't worry. You're covered with Typar® HouseWrap.

## TYPAR GUARANTEE

If Typar® HouseWrap is ever damaged by weather or under normal construction conditions, we'll replace it at no charge. Labor is not included. Failure to follow proper installation instructions will void this guarantee. Apply Typar immediately after framing is completed and insulation has been installed. If attaching before windows and doors are installed, use staples or Typar directly to studs or plywood, use staples or large-head nails. If applying over sheathing, be sure to use large-head sheathing nails long enough to penetrate and grip framing studs.



Typar HouseWrap is your best defense against the elements. Keeps studs dry, even on wet soggy days. Stays put in the driving wind. And reduces drafts to save energy costs for your homeowners. Unconditionally guaranteed. Now that's coverage you can count on. For more information, call **800-321-6271**.



**TYPAR**   
HouseWrap



Which  
Texas  
symphony  
hall has  
been  
described  
as "music  
for the  
eyes?"



Listen. Learn.

The *Shape of Texas*, a new radio series featuring architectural and travel destinations, is funded in part by *Texas Architect* magazine and *Texas Highways* magazine. To find out how you can hear *The Shape of Texas* in your area, call your local NPR radio station or contact TSA.

## HEADERS WITHOUT HEADACHES™



Trus Joist MacMillan's TimberStrand® LSL Header is 3½" thick and available in a variety of depths, making it the perfect one-piece framing solution for windows and passage doors.

The superior performance and uniform dimensions of the TimberStrand® LSL Header can drastically reduce call-backs to fix drywall cracks or nail pops above doors and windows, problems commonly caused by headers made from ordinary lumber.

For more information about building with Trus Joist MacMillan's TimberStrand® LSL Headers, contact Steve Sellers at 830-980-2242.



HOME OF THE FRAMEWORKS® BUILDING SYSTEM

TimberStrand®, and Trus Joist MacMillan® are registered trademarks of Trus Joist MacMillan, A Limited Partnership, 200 East Mallard Drive, Boise, Idaho 83706.

Circle 32 on the reader inquiry card

## A Better Barrier!



**Tyvek®**  
CommercialWrap™

Tyvek® CommercialWrap™ is the premier wrap in the DuPont Tyvek® Weatherization System. It installs quickly and easily and provides exceptional moisture management and protection, keeping air and bulk water out while allowing moisture vapor to breathe through. Specify Tyvek® CommercialWrap™. For more information, or to speak with a DuPont Tyvek® Specialist, call 1 800-28-TYVEK (1 800-288-9835) or email tyvk@aol.com



### Texas Distributors

**Don Thornton** tyvk@aol.com  
214-350-3834 fax 214-351-0821  
P.O. Box 543154 Dallas, TX 75354-3154

**Jason Moyer** moyerjason@hotmail.com  
214-794-8658 fax 817-358-8818  
1130 Bear Creek Pkwy., #1604 Euless, TX 76039

**Dan Donihoo** mrtyvek@intx.net  
210-655-8221 fax 210-655-0910  
12502 Enchanted Oaks San Antonio, TX 78233

**Rick French** rickfrenchgr\_a@hotmail.com  
281-454-5044 fax 281-454-4233  
P.O. Box 3474 Humble, TX 77347-3474

Circle 9 on the reader inquiry card

Texas Architect 11/12 1999 53



**Willamette Industries, Inc.**, has created a new zero-formaldehyde fiberboard. The medium density fiberboard (MDF), Euro ZF, maintains all the normal characteristics of MDF: smooth surfaces, cutting and routing without splintering or breakout, high-strength screw holding, and stability. No formaldehyde, in any form, was used during its manufacturing. Developing a MDF with a low formaldehyde content was important be-

cause in environmentally sensitive building such as hospitals, museums, schools, or nursing homes, small levels of air pollution can affect what is inside.

Although formaldehyde is found naturally in wood, Euro ZF contains less than one milligram of formaldehyde per 100 grams, which is lower than the HUD 24 standard in the United States. Formaldehyde emissions from Euro ZF are well below general ambient outdoor levels.

Euro ZF was recently used for the wall paneling, display cases and furniture in the construction of the Museum of Scotland. The museum houses a collection of more than 10,000 Scottish artifacts, which are extremely sensitive to air quality.

Ready to build faster? R-Control® Structural insulated panels are built to order and turn blueprints into buildings in record time. Call Therma Foam in Fort Worth toll free at 800-333-3626 to find out about a better way to build or find us at [www.thermafoam.com](http://www.thermafoam.com)

## R-Control® Structural Insulated Panels

R-Control® panels are manufactured in Dallas. They are code-listed by all three building codes for residential and light commercial construction. They can be effectively applied to replace conventional framing for walls, roofs, and floors. All panels are Timbor-treated for complete termite and carpenter ant protection. Factory-fabricated to your plans, R-Control® panels offer increased strength and energy-effi-

ciency to provide unique and lasting benefits in a professionally designed project.

**THERMA FOAM, INC.**



**P.O. Box 161128  
Fort Worth, TX 76161  
800-333-3626**



**California Economizer** is introducing a new low pressure zoning damper. The new, strong, high-end damper is equipped with an interior beaded seal for tight closure to avoid leakage. This feature provides continuous room-by-room control and increases comfort.

The damper's hat section is insulated to avoid sweating and can operate at voltages as low as 17VA. California Economizer makes low pressure dampers in sizes from six to 16 inches in circumference, and for residential or commercial projects. It opens against and supports external static pressures of 0.5 inches W.C.

California Economizer also offers ten zoning systems, ranging from residential systems for two to 20 zones to commercial systems supporting up to 200 rooftop units. Modulating diffusers and DDC controls that are complementary with the HVAC industry's zoning products are also available. The systems are compatible with major manufacturers' equipment, including gas-electric, electric/electric, heat pumps and geothermal units.

Circle 67 on the reader inquiry card

## Index to Advertisers

| Page   | Advertiser                            | Circle No. |
|--------|---------------------------------------|------------|
| 2, 19  | Acme Brick                            | 16         |
| 4      | AIA Trust                             | 14         |
| 18     | Arriscraft International              | 37         |
| 24     | BGR Specialties                       | 206        |
| 51     | BMC West                              | 33         |
| 24     | Cold Spring Granite                   | 52         |
| 6      | Decoustics                            | 30         |
| 31     | DuPont Tyvek Home Wrap                | 137        |
| 61     | Early Texas                           | 225        |
| 65     | Featherlite Building Products         | 6          |
| 62     | Fugro South                           | 31         |
| 63     | Glass Block Shop                      | 104        |
| 63     | HBC Engineering                       | 61         |
| 20     | Hunter Douglas                        | 205        |
| 22, 53 | ICI Paint Stores                      | 133        |
| 16     | Itech Steel Inc.                      | 96         |
| 62     | Jack Evans & Associates               | 54         |
| 21     | Jaster-Quintanilla                    | 199        |
| 62     | JEH Company                           | 23         |
| 63     | Jose Guerra, Inc.                     | 131        |
| 61     | L.A. Fuess Partners                   | 2          |
| 26     | Landscape Forms                       | 105        |
| 30     | Lehigh Portland Cement                | 35         |
| 11     | Marvin Windows Planning Center        | 28         |
| 9      | Masonry & Glass Systems, Inc.         | 10         |
| 63     | MCT Sheet Metal Inc.                  | 71         |
| 63     | Milestone                             | 66         |
| 23     | Miller Blueprint                      | 13         |
| 8      | Morganti Group, Inc.                  | 202        |
| 15     | MW Builders                           | 203        |
| 6      | PBS&J                                 | 215        |
| 60     | Pelton Marsh Kinsella                 | 81         |
| 6      | Petersen Aluminum                     | 83         |
| 8      | Pohl, Inc. of America                 | 204        |
| 10     | PyroTherm/Texas Industries            | 242        |
| 61     | Raba Kistener Consultants             | 47         |
| 24, 52 | Reemay Inc.                           | 106        |
| 1      | Southern Building Code Congress Int'l | 29         |
| 29, 55 | Southwest Terrazzo                    | 99         |
| 61     | Stairways, Inc.                       | 39         |
| 61     | Superior Shakes of Texas              | 209        |
| 10     | Texas EIFS                            | 19         |
| 7      | Texas Masonry Council                 | 207        |
| 61     | Texas Woods                           | 40         |
| 32     | TexaStone Quarries                    | 62         |
| 54     | ThermaFoam                            | 67         |
| 23, 55 | TrusJoist MacMillan                   | 32         |
| IFC    | USG Interiors                         | 48         |
| 53, 66 | Weatherization Systems                | 9          |
| 60     | Wrightson, Johnson, Haddon & Williams | 212        |
| 60     | York Metal Fabricators                | 72         |




**DULUX:** Dulux is the world's leading brand of premium quality interior and exterior paints designed to deliver the highest level of performance.



**INDUSTRIAL:** ICI Devco Coatings is a complete line of protective maintenance and heavy-duty coatings with an established reputation for surface-tolerant technology.



**DULUX PROFESSIONAL:** Our line of interior and exterior paints for high-quality commercial and custom jobs that demand superior performance.

## A COMPREHENSIVE PRODUCT RANGE BUILT FOR THE PROFESSIONAL MARKET



**SPECIALTY:** Special products for specific applications - Woodline Interior and Exterior wood finishes, and DecaFlex elastomerics.

**SPEED-WALL:** Interior and exterior products for high volume commercial repaint and new construction.

**ULTRA-HIDE:** Our complete offering of wall and trim finishes, primers, disc filters, spon filters, crystals and textured coatings.



Product breadth, performance and quality. The product range from ICI can handle a full range of applications and challenges. For your nearest ICI Dulux Paints store call: 1-800-984-5444 or Fax: 210-344-6883

**ICI Dulux PAINTS**

Circle 133 on the reader inquiry card

## TERRAZZO—A GREEN BUILDING CHOICE

Architects, specifiers and contractors who adhere to "Green Building" standards are finding that terrazzo flooring is a fully recognized, environmentally-friendly product.

As indoor air pollution concerns continue to rise, Terrazzo offers a "safe harbor," beating all other popular flooring materials with low VOCs and resistance to buildup of airborne contaminants. Terrazzo will not emit noxious vapors that invisibly cloud indoor air supply. It also will not fade, gouge, peel, or stain... and it does not need to be replaced every 10, 20 or more years. Terrazzo is durable, color permanent, and easy to maintain.

Tests have also been conducted to assure that Terrazzo grinding waste is a non-hazardous waste product. Using standards set by the Environmental Protection Agency (EPA), an epoxy Terrazzo sample passed the EPA tests with flying colors. The EPA tests cover ignitability, corrosivity, EP toxicity and reactivity. The epoxy sample was selected for testing because this material, unlike traditional cement binding material is a newer synthetic product.

Terrazzo is not only a safe and friendly product but it's one of history's enduring surfaces, offering dazzling long-life appeal, low maintenance and unlimited design opportunities.

### SOUTHWEST TERRAZZO ASSOCIATION INC.

309 Gold Street  
(877) 355-4400

Garland, Texas 75042  
(830) 990-0692

# Survey

## Tracks to the Future 56

**TRANSPORTATION** The president of the Austin-San Antonio Corridor Council makes his best pitch for commuter passenger trains.

## When California was Paradise 59

**BOOKS** *Pierre Koenig* tells the story of the Case Study houses and the rise of Modernism in Southern California.

## The Last Thirty Years 59

**BOOKS** In *Contemporary World Architecture*, British architecture critic Hugh Pearman takes a comprehensive look at the last thirty-years.

## Tracks to the Future

**TRANSPORTATION** Anyone who's driven lately on Interstate 35 between Austin and San Antonio knows that it's a deathtrap. Booming NAFTA trade and exploding population growth in Central Texas have stressed the highway to the breaking point. In seeking solutions, policymakers are eyeing a bold, far-reaching project that could re-introduce a 19th century technology for a 21st century purpose: passenger rail between Austin and San Antonio.

I-35 in the Austin-San Antonio-Corridor is the deadliest highway in Texas, with more than 100 deaths from 9000 accidents in the

To meet anticipated demand by 2025, I-35 would have to be expanded from the current six to 18 lanes through central Austin—a daunting engineering and political challenge that would require triple-decking the existing roadway.

last 36 months—double the statewide average for an urban roadway. The reason is twofold: too many people and too many trucks. Each one percent of regional population growth increases I-35 traffic three to four percent, and the corridor now posts double-digit annual population increases. Projections show the area's current 2.3 million population will grow to four or five million by 2020, the size of Dallas/Fort Worth today. From Austin to San Marcos, for example, traffic has increased 754 percent since the mid-1960's and doubled in the last 48 months alone. As for trucks, 80 percent of Mexico's US/Canadian trade passes through Texas, 75 percent by truck on I-35. Loaded truck crossings at Laredo have risen from a pre-NAFTA average of 15,000 to

20,000 per month to 110,000, a 400 percent increase since 1994. By year 2000, it will take longer to go from San Antonio to Dallas than it did 30 years ago, before the interstate was built. Within the next ten years, fatalities, congestion, travel times, and air pollution will all double along I-35 in the corridor.

### Slouching Toward Gridlock

I-35 was built as part of a national defense transportation grid that was begun just after World War II, and it was almost an afterthought to the east/west transcontinental routes like I-10 and I-40. But with post-war population flight from urban centers to the suburbs along I-35's length, with the continental tradeflow shifts resulting from NAFTA, and with growth in the Mexican and Canadian economies exceeding the highway's capacity, the millennium finds transportation specialists pondering what to do when a freeway system has finally matured.

To meet anticipated demand by 2025, I-35 would have to be expanded from the current six to 18 lanes through central Austin — a daunting engineering and political challenge that would require triple-decking the existing roadway. A far more practical solution is the alternate highway being fast-tracked by the Texas Department of Transportation, State Highway 130, that will parallel I-35 from Seguin to Georgetown and offer through-shipments a way to avoid congestion in the Austin-San Antonio Corridor. But even that massive \$900 million project promises only partial, temporary relief.

### The Shiny Irons

Another solution would be to shift half of the shipments currently going by truck to freight railroads, and therein may lie the opportunity for both congestion relief and major economic development benefits not just for the Austin-San Antonio Corridor, but for the entire state.

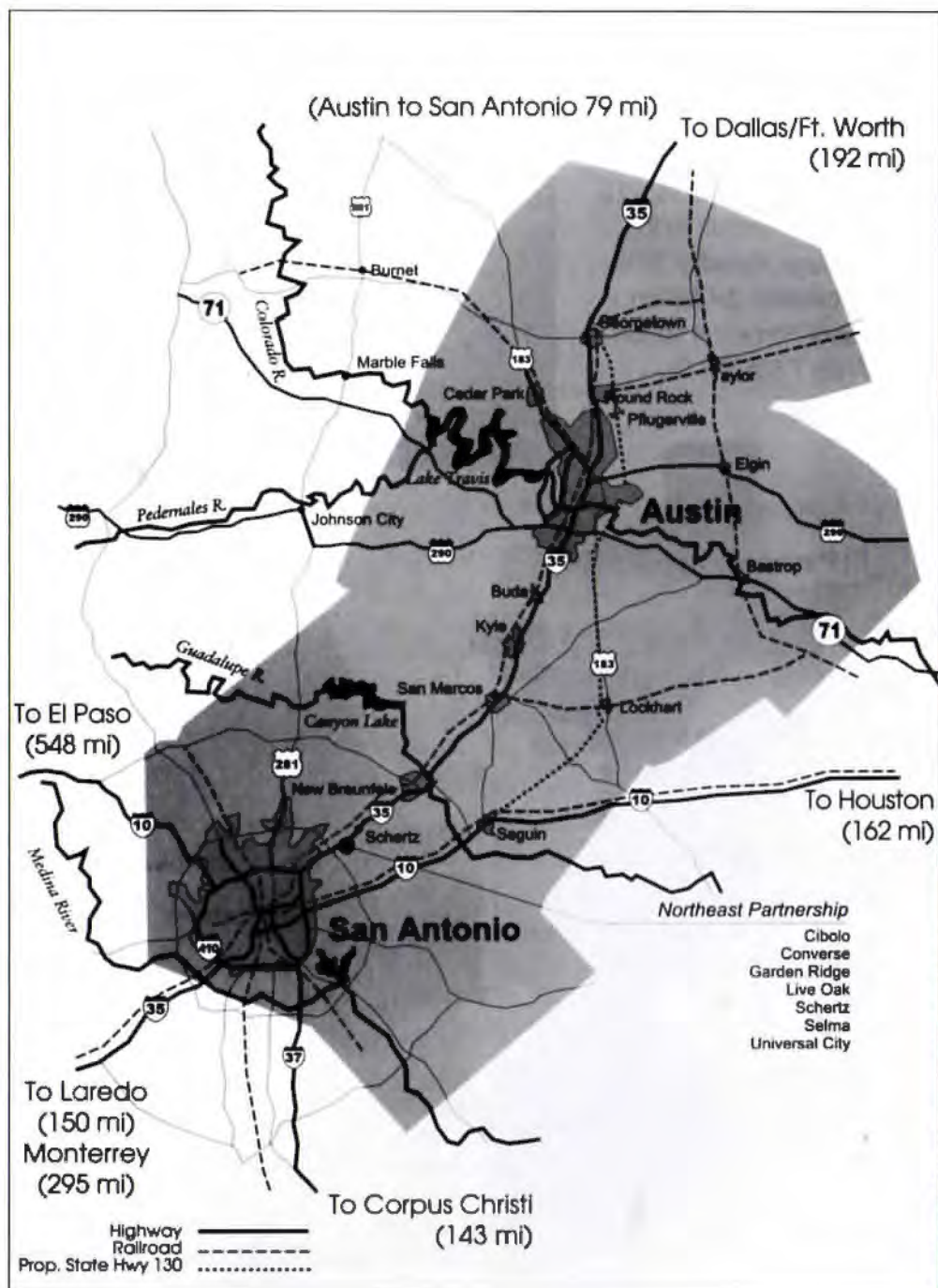
Currently, the only significant rail line in the corridor is the Union Pacific railroad from Laredo to Dallas. The tracks were laid more than one hundred years ago—long before the towns along its route became heavily urbanized. Now, there are nearly 200 at-grade crossings (places where a roadway crosses the tracks) on the 90-mile route just between Round Rock and San Antonio. In

addition to the commercial inefficiencies inherent in these crossings—trains must slow down as they pass through small and large cities—there are the related safety problems obvious in the railroader's term used to describe them: "auto-train conflicts." These conflicts have resulted in as many as 14 deaths a year in the corridor. Moreover these crossing having a profound impact on traffic congestion in Georgetown, Round Rock, San Marcos, and New Braunfels. San Marcos, for example, has 33 at-grade crossings, 13 within a single mile of downtown. Thirty-four Union Pacific trains run through San Marcos a day, some up to a-mile-and-a-half long that block every intersection in town. Two-thirds of the city lives on one side of the tracks, while the hospital, fire station, and police station are on the other side. This would not be such a problem with commuter passenger trains, as they would consist of only a few cars and would transit at-grade crossings in under a minute.

### New Uses for Old Infrastructure

A comprehensive solution to these problems has emerged that is simple in concept, but relatively complex to implement: build State Highway 130 around the most congested portion of I-35; shift Union Pacific's through-freight rail operations into that new corridor so that it is grade-separated, faster, and more efficient than the current line; and develop the existing Union Pacific right-of-way for a duty more suitable to its 21st century role in the heart of a modern, heavily-urbanized area—passenger commuter rail.

A recent feasibility study conducted by the Carter-Burgess engineering company estimates that a passenger rail line through the corridor would move a minimum of three to four million riders annually (8-11,000 per day) on a route directly paralleling I-35 at its most congested point. Spurs from the existing rail line could also connect Georgetown and the new Austin-Bergstrom airport to the system. By acquiring half of Union Pacific's existing right of way and building a new passenger line, a commuter rail service could be put in place for a capital construction cost of \$475 million and operating costs of about \$25 million per year. Big numbers, but consider for a moment that three freeway interchanges currently under construction in the corridor



will cost over \$100 million apiece and will probably be over-capacity by the time they are completed. Moreover, although that \$475 million price-tag is the rough equivalent of constructing an additional single new lane on I-35, there is no longer room to add more lanes to the interstate beyond current plans. Increasing capacity on a passenger rail line, however—once infrastructure is in place—means simply adding more cars.

There are other advantages, as well. Through careful investment in aggressive grade separation and advanced technologies, travel time between the cities would be con-

**Most important, while rail doesn't end congestion, it gives you an alternative to sitting in it.**

tinually decreasing, while travel times on I-35—for the foreseeable future—will be continually increasing. Rail is less vulnerable to weather or to a jackknifed 18-wheeler. Rail can be time- and cost-competitive with the automobile. It is certainly safer, and offers the rider a more productive use of their time, reading or working en route.

## Coming Next Issue . . .

The January/February issue looks ahead to the 21st century by focusing on a new generation of talented, young architects. This issue will also mark the 50th anniversary of *Texas Architect* and the launch for a redesign of the magazine. *Texas Architect* will celebrate the new year and the new millennium with a fresh, new look.

Combined with appropriate land-use policies, a passenger line could lead to denser development around the railheads in the city centers, thus reducing suburban sprawl, and encouraging development within the cities and away from the fragile Edwards Aquifer and the Texas Hill Country. A passenger line would also enhance the urban tax base. (In suburban Arlington, Virginia, for example, the local tax rate went from \$1.46 to 79 cents per \$100 after being linked to the Washington Metro system.)

While both San Antonio and Austin are currently suffering from critical workforce and affordable housing shortages, the surrounding counties have higher-than-average unemployment rates. An efficient transportation alternative could help solve both problems. Economically, the aging downtowns of these communities would experience revitalization around the railheads and local real estate would increase in value as people realized they could experience the lifestyle of a small town while enjoying the higher wages of Austin and San Antonio—all without the life-threatening and stressful commute on I-35.

## The Critics Respond

Despite these many advantages, there are still those who argue that passenger rail is too expensive, that it requires government subsidies, that it doesn't reduce congestion or air pollution enough, and that lastly, Texans simply won't ever get out of their cars to use it. The \$475 million capital cost for an Austin-San Antonio line represents, on a regional basis, a sales tax of about one eighth of a penny; operating costs would amount to about \$.015 of a penny. Metropolitan transit authorities in Austin and San Antonio each currently collect about \$100 million a year for their operations, thus only about five percent of their current revenues, bonded over 30 years, could fund the service, if, as has happened elsewhere, the federal government picks up half the capital cost. Or, the system could be financed through a new, region-wide tax of about one-tenth of a penny.

It is true that such a service—just as with airports and most particularly highways—would be subsidized. Proponents believe that the economic, social, land use, and environmental benefits derived from the proposed system are well worth the cost.

It is also true that impact on congestion would be incremental, removing about 10,000 cars a day from I-35. At peak hour, however, that five percent is significant, particularly combined with another 10-25 percent relief promised by SH 130. Every dollar invested in the rail line will make the train trip between cities faster; whereas we could invest \$20 billion in I-35 and the trip would never get any shorter than it is right now. Most important, while rail doesn't end congestion, it gives you an alternative to sitting in it.

As to whether or not Texans would use such a system, to say that they wouldn't seems to imply that they are not as smart as other people throughout the world. If rail travel is made faster, safer, cheaper, more convenient, and more pleasurable than car travel, Texans will use it: Dallas Area Rapid Transit (DART), for example, has become one of the most successful rail systems in the nation.

## The Next Steps

If there is sufficient political will, rail service between Austin and San Antonio could be in place within four years. The cities' metropolitan transit agencies, Capital Metro, and VIA, must take the lead in organizing and financing such a system with probable help from both the state and federal government.

Governor Bush signed legislation last year creating a political entity, the Austin-San Antonio Commuter Rail District, to manage the project. Austin has voted to form the district, and officials are now waiting to see if the other communities are willing to participate.

Meanwhile, progress continues on SH 130, with the Texas Department of Transportation voting in September to add \$891 million in funding authority for that project in the Unified Transportation Program for the year 2000. It took nearly 100 years for the rail and auto traffic congestion problems of the corridor to develop. It may take nearly that long to correct them. Passenger rail though, properly implemented, could be the track to the future.

*Ross E. Milloy is the president of the Austin-San Antonio Corridor Council and a frequent correspondent for the New York Times.*

## When California Was Paradise

Pierre Koenig

Text by James Steel and David Jenkins

Introduction by Sir Norman Foster

169 pages, hardback

Phaidon Press Limited, 1998

**BOOKS** Having seen combat in World War II, Pierre Koenig was not afraid to take risks in his civilian life. When a studio instructor at the University of Southern California rejected his plans for a steel frame house, Koenig, a third-year architecture student, raised the money and built it himself. In 1950, steel was thought to be too psychologically cold for a domestic dwelling. Koenig, however, believed that it would allow him to simplify the architectural diagram, and make the sort of relaxed houses that he was sure

post-war Americans wanted. In 1952, he again used steel frame to build the Lamel House in Glendale that *Arts and Architecture* featured in October, 1953, along with projects by Mies van der Rohe and Paul Rudolph. Koenig was subsequently invited to build two houses for *Arts and Architecture's* Case Study Program, which promoted Modernism in California. Both of these case studies, the Bailey House and the Stahl House, became icons of American architecture.

Using photos (many by Julius Shulman) and text, the authors, James Steel and David Jenkins, trace the rise of Modernism in Southern California, the Case Studies Program, and the arc of Koenig's early career. The authors divide the book and Koenig's projects into three sections: "Entering Archi-

tectural Practice & The Pursuit of an Ideal," "The Genesis of the Case Study House Program," and "The MOCA Show & the Modernist Revival." In addition to substantial introductory essays for each section of the book, there are 27 projects, each well described with text, photographs, elevations, and floorplans. Looking at these projects, you remember what a mecca California was.

John Davidson



## The Last Thirty Years

Contemporary World Architecture

Text by Hugh Pearman

510 pages, hardback

Phaidon Press Limited, 1998

**BOOKS** In *Contemporary World Architecture*, Hugh Pearman, the architecture and design critic of *The Sunday Times*, London, takes a comprehensive look at international architecture in the last thirty years. Pearman chooses as his point of departure the 1970s when the old order of International Style Modernism crumbled, then he sets out on what he describes as "an oblique search for consensus." Rather than focusing on the many competing styles of the last quarter century, he examines 13 building types and the broad social and economic forces that shaped them. Pearman writes, "The most basic changes in architecture occur not because of academic theory or pure experiment, but because of changes in the way people live, work, are governed, entertain themselves, regard the outside world, and, most importantly, fund their buildings."

The book is divided into 13 chapters: visual arts (museums and galleries), performance (opera houses, theaters, and concert halls), learning (schools, universities, and libraries), religion (places of worship), consumerism (malls, shops, and bars), living (houses and apartments), workplace (offices and business parks) industry (factories and research

centers), leisure (theme parks, hotels, and visitor centers), transport (airports, stations, and shipping terminals), sport (stadia, gymnasiums and pools), the civic realm (public spaces and structures), and towers (vertical cities).

Pearman's view on the impact of the despised shopping mall is particularly interesting. He sees its influence not only in the design of airports, but also on the arts: "As America invented the modern shopping mall in the form of Victor Gruen's Northland Center in Detroit, 1949-54, and rapidly evolved it subsequently, so America invented the modern cultural mall in the form of New York's Lincoln Center, 1955-66, by Harrison, Johnson, Foster, Abramovitz, Saarinen, and SOM, providing a choice of opera, ballet, symphonic music and drama like rival department stores in a mall. Just like a successful mall, the Lincoln Center has extended itself at intervals, providing other cultural attractions which add to the 'destination' status of the place."

Pearman says that the office building has become "less like a piece of architecture, and much more like a very large piece of office equipment." He writes that architects have been attracted to the "green" movement not only for environmental reasons, but because it has allowed them to reclaim some lost design territory. "It is arguable—but perfectly possible," Pearman suggests, "that the 'green'



movement signals the biggest shift in the appearance of architecture since the advent of heroic modernism in the 1920s. Then again, stylistic inertia is a powerful force in its own right, with architects often readier to adapt old forms than to embrace new ones."

This is a very handsome, lushly produced book that serves as an excellent reference to the last 30 years of architecture. More than 600 projects are included, seemingly everything of consequence built within the last three decades.

JD

# MARKETPLACE

**Statement of Ownership, Management, and Circulation**

1. Publication Title: **TEXAS ARCHITECT** 2. Issue Date: **10/1/99**

3. Issue Frequency: **Quarterly** 4. Number of Issues Published Annually: **4** 5. Annual Subscription Price: **\$21**

6. Complete Mailing Address of Known Office of Publication (Not printer): **BILMANTHILL (111) MYL-GMP/ENHANCED & PEGGY L SHUPP #21  
246 CONGRESS AVE. BUILDING 100 AUSTIN TX 78701  
512-419-7336**

7. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer): **MANAN JETHAVA  
512-419-7336**

8. Owner: **SAME**

9. Full Name and Complete Mailing Address of Publisher: **MANAN JETHAVA (SAME ADDRESS AS ABOVE)**

10. Full Name and Complete Mailing Address of Managing Editor: **JOHN DAVIDSON (SAME)**

11. Full Name and Complete Mailing Address of Business Manager: **TAMARA HILL (SAME)**

12. Full Name and Complete Mailing Address of Principal or Controller: **TEXAS SOCIETY OF ARCHITECTS  
246 CONGRESS AVE. SUITE 930  
AUSTIN TX 78701**

13. Full Name and Complete Mailing Address of Publisher: **TEXAS ARCHITECT**

14. Issue Date for Circulation Data Below: **SEPTEMBER 1999**

| 15. Extent and Nature of Circulation        |  | Average No. Copies Each Issue During Preceding 12 Months | No. Copies of Single Issue Published Nearest to Filing Date |
|---|--|--|---|
| a. Total Number of Copies (Net press run)   |  |  |   |
| 16. Paid Distribution (Net press run)       |  | 12,072   | 13,104  |
| 17. Total Paid Distribution (Net press run) |  | 6,477  | 7,242   |
| 18. Total Free Distribution (Net press run) |  | 5,595  | 5,862   |
| 19. Total Free Distribution (Net press run) |  | 5,595  | 5,862   |
| 20. Total Distribution (Net press run)      |  | 12,072   | 13,104  |
| 21. Copies not Distributed (Net press run)  |  | 6,328  | 6,896   |
| 22. Total (Net press run)                   |  | 18,400   | 20,000  |

23. I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

24. Signature and Title of Publisher, Business Manager, or Owner: **MANAN JETHAVA** Date: **9/30/99**



**WJHW**

Consulting and Design Services in Acoustics, Sound, Noise Control, Multi Media, Video, Broadcast and Theatrical Systems

Dallas • San Antonio

13714 Gamma Road, Suite 110  
Dallas Texas 75244  
972.934.3700 (voice)  
972.934.3720 (fax)  
bhaddon@wjhw.com (email)  
www.wjhw.com (internet)

**BILL HADDON**  
Principal

WRIGHTSON, JOHNSON, HADDON & WILLIAMS, INC.

Circle 212 on the reader inquiry card

**PMK Pelton Marsh Kinsella**

Consultants in

- Acoustics
- Audio/Visual
- Theatre Planning
- Theatrical Lighting and Equipment
- Stage Rigging and Equipment
- Broadcast Facilities

1420 W. Mockingbird Lane, Suite 400,  
Dallas TX 75247

For more information, please call 214-688-7444

Circle 81 on the reader inquiry card

**y mf** DAVID C. YORK

*Award-winning fabricator for award-winning projects*

**York Metal Fabricators, Inc.**

ALUMINUM - STAINLESS STEEL - BRASS  
GLASS RAILS - PIPE RAILS - PICKET RAILS - CUSTOM HANDRAILS

800-255-4703  
405-528-7495  
FAX 405-528-7426

27 N.E. 26th St. (73105)  
P.O. BOX 18149  
OKLAHOMA CITY, OK 73154

Circle 72 on the reader inquiry card



# MARKETPLACE



**STAIRWAYS inc.**

ANY SIZE  
STEEL • ALUMINUM  
WOOD • BRASS  
STAINLESS

Shipped in a Complete  
Unit or Kit  
**\$425 & up.**

Stock for Fast Shipping  
*Free Brochure*  
**713-680-3110**  
Toll Free  
**1-800-231-0793**  
Fax 1-713-680-2571  
www.stairwaysinc.com

4166 Pinemont  
Houston, TX 77018

Circle 39 on the reader inquiry card



- Asbestos
- Construction Testing & Observation
- Environmental Consulting
- Failure Analysis
- Geotechnical Engineering
- Pavement Consulting


*A Texas Company with Three Decades of Experience*

www.rkci.com 800•316•4913

|                 |                |                 |
|-----------------|----------------|-----------------|
| Austin, TX      | El Paso, TX    | McAllen, TX     |
| Brownsville, TX | Las Cruces, NM | Monterrey, MEX  |
| Cd. Juarez, MEX | Laredo, TX     | San Antonio, TX |

Circle 47 on the reader inquiry card

**L.A. FUESS PARTNERS**  
*Structural Engineers*



*Celebrating our twentieth year*

Lawrence A. Fuess, PE  
Lloyd R. Johnson, Jr.  
Jon C. Herrin, PE  
Mark B. Peterman, PE  
Ann E. Piazza, PE  
Walter R. Willcox, PE  
Thomas R. Campbell, PE

3400 Carlisle Street Suite 200  
Dallas, Texas 75204  
tel. 214.871.7010  
fax 214.969.0065  
www.lafp.com

Circle 2 on the reader inquiry card

## Real Wood for Real Texans

Custom flooring manufacturer: Mesquite, Pecan, Cypress, Cedar, Walnut, Cherry, Maple, and Oak. Also providing Lumber, Beams, and Mantles.

Distributor for Linden Lumber and Bruce Flooring

**Texas Woods, Inc.** 

Call David Miller today: 800-687-1779  
fax 512-303-7700 email mesquite@bastrop.com  
http://www.texaswoods.com Bastrop, Texas

Circle 40 on the reader inquiry card

*Beautiful* **Southern Pine Shakes**

- Age to a beautiful silver gray
- Energy efficient
- Affordable
- 50-year warranty against insects and decay

Call for more information and a free brochure:

**Superior Shakes of Texas, Inc.**  
P. O. Box 405, Willis, TX 77378  
(800) 635-0573 Fax: (409) 856-1794

Circle 209 on the reader inquiry card

# MARKETPLACE



**HERITAGE BARNES**  
Historic 18<sup>th</sup> & 19<sup>th</sup> Century  
Barns & Log Cabins

- Timber frame construction
- Mortise & tenon joinery
- Hand-hewn timbers
- Erected on your site
- Home & office use



Call 1-800-841-6351 / [www.heritagebarns.com](http://www.heritagebarns.com)

Circle 225 on the reader inquiry card

Mechanical Noise Control for ABIA  
**TRANSPORTATION NOISE SOLUTIONS**

Architectural Acoustics  
Environmental & Mechanical Noise Control  
Structural Vibration Control

**JACK EVANS & ASSOC., INC.**

ENGINEERED VIBRATION ACOUSTIC & NOISE SOLUTIONS

[evansjb@io.com](mailto:evansjb@io.com)

**512 / 371-0800 FAX / 371-0825**

Circle 54 on the reader inquiry card

**FUGRO SOUTH, INC.**

**Geotechnical Engineering,  
Construction Materials Testing and  
Geophysical Engineering**

Austin ..... (512) 444-3233  
Beaumont ..... (409) 840-5551  
Corpus Christi ..... (512) 882-5411  
Dallas ..... (972) 484-8301  
Fort Worth ..... (817) 589-2428  
Houston ..... (713) 778-5533  
San Antonio ..... (210) 655-9516  
Waco ..... (254) 840-2252  
Lake Charles, LA .. (318) 439-1731



**Pavement Consulting**  
Fugro/BRE ..... (512) 346-0870  
(formerly Brent Rauhut Engineering)



A member of the Fugro group of companies  
with 200 offices in 45 countries.

Circle 31 on the reader inquiry card

**We Roof Legends**

|   |   |   |
|---|---|---|
| <p><b>Ludowici<br/>Clay Tiles</b></p> <p>For over 400 years Ludowici's craftsmen have produced legendary clay roof tiles for the finest commercial, institutional, and residential projects. See Ludowici tiles at UT Austin; TCU, Fort Worth; Texas Tech, Lubbock; Randolph Air Force Base, San Antonio; and Moody Mansion, Galveston.</p> | <p><b>Hilltop<br/>Slate</b></p> <p>The "natural slate company" quarries Vermont's finest. The discerning architect may choose grassy green, mottled purple, or economical sea green. The tradition of slate starts at Hilltop. See our slate at First Methodist Church, Fort Worth, and Exxon World Headquarters, Irving.</p> | <p><b>North Country<br/>Black Slate</b></p> <p>This smooth, rich black slate with a slight lustre is a favorite of architects, contractors, and building owners throughout the world. This is a black slate that stays black! See North Country Black Slate at the Ellis County and Lockhart Courthouses.</p> |
|---|---|---|

**Available from the manufacturers' exclusive representative:**



**JEH/EAGLE SUPPLY, INC.**

972-364-0545 fax 972-364-0554  
Addison Austin Mansfield Colleyville Frisco Mesquite

Circle 23 on the reader inquiry card

# MARKETPLACE



**MILESTONE**  
ARCHITECTURAL ORNAMENTATION

MILLED MASONRY MOLDINGS  
[www.milestoneitd.com](http://www.milestoneitd.com)

Circle 66 on the reader inquiry card

Jose I. Guerra, P.E.  
President



**Jose I. Guerra, Inc.**  
Consulting Engineers

Structural ♦ Civil ♦ Mechanical ♦ Electrical

2401 South IH-35, Suite 210 / Austin, Texas 78741  
(512) 445-2090 / Fax (512) 445-2099  
e-mail: [jguerra@guerra.com](mailto:jguerra@guerra.com)

Circle 131 on the reader inquiry card



**MCT Sheet Metal, Inc.**  
Sheet Metal Roofs

Established 1977

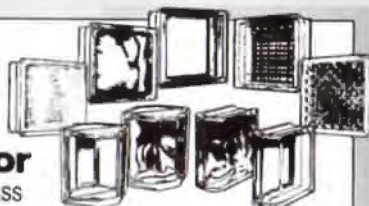
- Retro-Fit
- Standing Seam Roofs
- Chemical Storage Buildings

Katy Texas  
281-391-0285  
Beaumont, Texas  
409-794-3613

E-mail: [sales@mctsheetmetal.com](mailto:sales@mctsheetmetal.com) • Internet: [www.mctsheetmetal.com](http://www.mctsheetmetal.com) • Pat Coussens • Todd Coussens

Circle 71 on the reader inquiry card

PITTSBURGH CORNING  
**PC GLASSBLOCK**  
PRODUCTS



**Master Distributor**

<http://www.cybernetsol.com/glass>

**Wholesale and Contractor Sales  
of PC GlassBlock and Accessories**

**The Glass Block Shop**

Dallas (972) 243-7343 (800) 777-2107 Fax (972) 243-3666  
San Antonio (800) 786-4884 (210) 590-4807



Circle 104 on the reader inquiry card

**HBC**

ENGINEERING, INC.

- Geotechnical Engineering
- Construction Materials Testing & Inspection
- Environmental & Asbestos Consulting
- Facilities Engineering

|        |              |           |              |
|--------|--------------|-----------|--------------|
| AUSTIN | 512-442-1122 | FT. WORTH | 817-268-8600 |
| DALLAS | 214-630-1010 | HOUSTON   | 713-690-8989 |

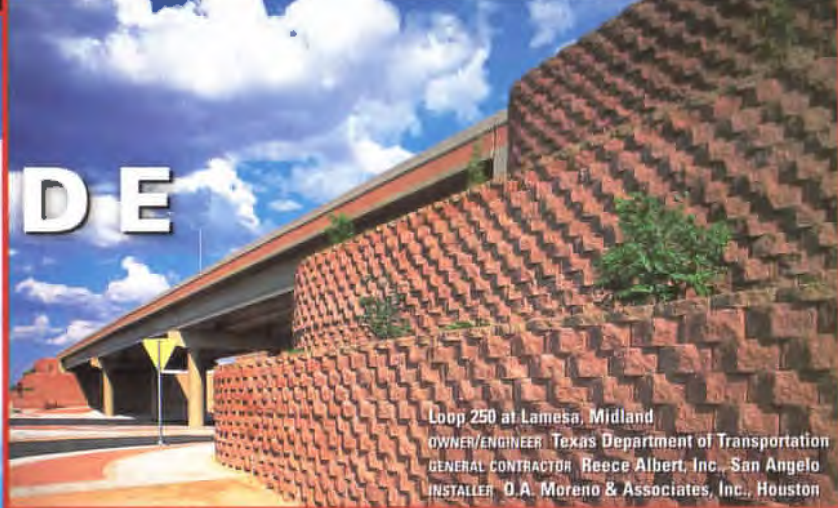
Circle 61 on the reader inquiry card



courtesy Texas Department of Transportation

erosion

*Featherlite Landscapes:*  
**Beauty BESIDE  
 E &  
 L O  
 W**



Loop 250 at Lamesa, Midland  
 OWNER/ENGINEER Texas Department of Transportation  
 GENERAL CONTRACTOR Reece Albert, Inc., San Angelo  
 INSTALLER O.A. Moreno & Associates, Inc., Houston



**MESA**  
 Retaining Wall Systems

In landscape design—whether retaining walls or paving—Featherlite, the choice of the Texas Department of Transportation for this project, is the name you can trust for your projects. Mesa Retaining Wall Systems are engineered with Tensar grid reinforcing, which reaches back into the soil to fight erosion and ensure a firm hold. Use Mesa instead of poured-in-place concrete for cost-effective, structurally sound walls from six feet to fifty feet tall. Match Mesa to our split face concrete masonry, or complement it with Featherlite Concrete Pavers. These simple dry-cast paving stones can be combined in patterns and in color combinations for extra visual interest. Concrete's durability and economy make Featherlite Concrete Pavers your smart paving choice.

**Featherlite Concrete Pavers Make a Difference**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Durability</li> <li>• Structural Integrity</li> <li>• Low Maintenance</li> <li>• Cost Effectiveness</li> <li>• Design Flexibility</li> <li>• Variety of Colors, Textures, and Patterns</li> <li>• Ease of Installation</li> </ul> | <ul style="list-style-type: none"> <li>• Environmental Benefits</li> <li>• Resource Efficiency</li> <li>• Recycled/ Recyclable</li> <li>• Energy Efficiency</li> <li>• Surface Water Run-Off Reduction</li> <li>• Minimization of Construction Waste</li> <li>• Long Material Life</li> </ul> |
|--|---|

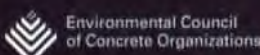
**FEATHERLITE**

Featherlite Building Products Corp.  
 512-472-2424 or 512-255-2573  
 www.featherlitetexas.com  
 tratwood@msn.com



Operation Downtown, Athens, Texas  
 OWNER/CONTRACTOR City of Athens Public Works  
 ENGINEER Velvin & Weeks Engineering, Athens  
 INSTALLER Texas Department of Corrections

PHOTOGRAPHER Ray Don Tilley, Bastrop



Circle 6 on the reader inquiry card

# Tyvek® CommercialWrap™—Making the Grade in Commercial Construction Put Us to the Test on Your Next Building!



"We recommended Tyvek® CommercialWrap™ for this hospital, because we wanted to use this as a test case for specifying breathable membranes instead of ordinary building felt in commercial construction. It has been a very successful test! In fact, Tyvek® CommercialWrap™ has done so well that it has fostered a good cooperative spirit among all the trades, especially with our drywall contractor! We wanted to create a watertight envelope during construction. Tyvek® CommercialWrap™ was the answer!"

— Gary Baker, AIA, Vice President, HKS Inc.



Presbyterian  
Medical Center,  
Allen, Texas



One building wrap has the strength, performance, and ease of handling for commercial construction. Tyvek® CommercialWrap™ is the premier wrap in the DuPont Tyvek® Weatherization System. Its spunbonded polyolefin resists air and water penetration with its non-perforated continuous microfiber web, which has microscopic pores large enough for moisture vapor to pass through, but small enough to resist air and liquid water. Tyvek® CommercialWrap™ is heavier and more durable than other Tyvek® wraps, with higher air and water resistance to provide extra protection and installation ease in commercial construction. Specify Tyvek® CommercialWrap™ when you can't afford not to have the job done right. For more information, or to speak with a DuPont Tyvek® Specialist, call 1 800-28-TYVEK® (1 800-288-9835).

## DuPont Tyvek® CommercialWrap™ Performance Counts:

- Protects installed R-value
- Superior moisture vapor transmission
- Double or better water holdout
- 50%-plus increase in wind load resistance



# Tyvek®

## CommercialWrap™

© 1999 DuPont. Tyvek® is a DuPont registered trademark for its brand of spunbonded olefin. CommercialWrap™ is a DuPont trademark for its brand of weatherization system. Circle 9 on the reader inquiry card