

# Specifying Detention Products With Insufficient Information



# Is Taking A Shot In The Dark.

In a detention facility, a product not designed to resist abuse and tampering can find some . . . unusual uses.

Remanufacturing is a way of life for inmates in prisons and jails. So, when you specify security hardware, or any product for that matter, it had better be up to the challenge.

Folger Adam has been building just such equipment for nearly one hundred years. Pick-resistant high security key cylinders, one-piece stainless steel mirrors, fully enclosed jamb-mounted locks, door operating devices, secure controls, and windows specifically made for the unique needs of detention facilities.

Too, we have more ways to apply our experience to help you achieve your security goals. By combining our large, flexible manufacturing capability with erection, maintenance, and construction management services, we are a single, highly qualified resource.

If you are actively involved in new construction or renovation in the detention arena, you should be working out of our DataFiles—the definitive equipment and systems information resource. Write and request your set today. After all, the last thing anybody wants is to be looking down the bore of a loaded drain pipe.





On the cover: Daniel Webster "80 John" Wallace Unit, Mitchell County, by JPJ Architects. Photography by Michael Lyon, Dallas.

Left: Fence detail from the Substance Abuse Treatment Facility at Brownwood, by DMJM /Jones & Kell. Photogra-phy by Michael Lyon, Dallas

# FEATURES

Busque el sinopsis que se encuentran al principio de cada historia principal.

| WHAT'S NEXT IN TEXAS   | 27              |
|--|-----------------|
| Writers Marc Brewster and Bob Sims of Dallas describe the p      | olans for \$1.5 |
| billion in state correctional construction to be spent in the ne | ext five years. |

### PRISON PROSPECTS Architect Barbara Nadel describes some of the forces behind the current boom in corrections and examines some of its long-term consequences.

### PORTFOLIO OF NEW CORRECTIONS CONSTRUCTION

| McAlester State Prison Maximum Security Addition<br>McAlester, Okla.   | 50   |
|--|------|
| Burton, Knowles & Love and Henningson, Durham and Richard  | dson |
| Daniel Webster "80 John" Wallace Unit, Mitchell County<br>JPJ Architects   | 52   |
| Substance Abuse Treatment Facility, Brownwood<br>DMJM and Jones & Kell   | 56   |
| Harris County Community Supervision<br>and Corrections Department "Baker Street" Facility<br>Morris Architects   | 58   |
| Harris County Community Supervision<br>and Corrections Department Conservation Work Program<br>Morris Architects | 60   |
| San Patricio County Juvenile Detention Center, Sinton<br>Wilson Kullman Architects                               | 62   |
| Psychiatric Facility Addition, Sugar Land<br>Hellmuth, Obata & Kassabaum   | 64   |

### DEPARTMENTS

| Editor's note     | 7    |
|-------------------|------|
| Letters           | 11   |
| News              | 14   |
| Of Note           | 15   |
| Calendar          | 17   |
| Small Practice    | 24   |
| Issues:           |      |
| Jobs on the Inte  | rnet |
| Laws, Regs &      | 32   |
| Red Tape          |      |
| Special Advertisi | ng   |
| Section           |      |
| Mosonry and       | 34   |
| Concrete          |      |
| Survey            | 68   |
| Products and      |      |
| Information       | 73   |
| . Marketplace     | 74   |
| TA Specifier      | 76   |
| Noise in Prisons  | and  |
| lails             |      |

# Pretty.

STRUCTOCORE™ Security Wall Systems.

An attractive alternative for the protection of people and valuables.

Take a continuous reinforced steel core. Surround it with a high-strength basecoat plaster. Then cover that with a coat of highly abrasion-resistant IMPERIAL® Finish Plaster in a smooth finish. And you've got a STRUCTOCORE™ Security Wall System. A two-hour fire-rated Security Wall System that's as formidable to penetrate as poured concrete or concrete block, and far better looking.

Originally designed for correctional institutions, STRUCTOCORE Security Walls are now being specified for a wide variety of other security applications: for banks and currency exchanges; for pharmacies and hospitals; for safeguarding furs, jewelry, computer data, financial records... it even meets ballistics and forced entry criteria as established by the U.S. State Department for embassy construction.

But there's more to STRUCTOCORE
Security Walls than security, there's also
economy and flexibility of design. It's easy
to install and less than half the weight of
conventional block and poured concrete
systems. It easily accommodates electrical
and plumbing services. Its thinner walls
take up less space. And it's easy to maintain
and repair.

To find out more about STRUCTOCORE Security Wall Systems, call: 1-800-USG-4-YOU.

# United States Gypsum Company USG

1994 United States Gypsum Company

See us in Booth 608 at the ACA Winter Conference in Dallas, January 16-18, or circle 50 on the reader inquiry card.



# TEXAS**ARCHITE**

January/February 1995

Texas Architect (ISSN: 0040-4179) is published seven times per year (bimonthly and in April) by the Texas Society of Architects, 114 West Seventh, Suite 1400, Austin, Texas 78701. TSA is the official Texas state organization of the American Institute of Architects (David Lancaster, Executive Vice President). Copyright 1995 by the Texas Society of Architects.

> Joel Warren Barna Editor Susan Williamson Associate Editor

5 5 Mark Denton Associate Publisher Carolyn Baker \$11/029-9838 Advertising Representative Ray Don Tilley \$13/303-7703. Advertising Representative Canan Yetmen Circulation Manager Linda Langan Membership Director Irene Garza Comptroller

TSA Publications Committee

C. Mark Seiley, AIA, Dallas (chairman); Dennis W. Clayton, AIA, Lubbock; Lawrence H. Connolly, AIA, Midland; Julius Gribou, AIA, College Station; Martin J. Harms, AIA, Lubbock; Vincent P. Hauser, AIA, Austin; Douglas Koehne, Assoc. AIA, Longview; Shafik I. Rifaat, AIA, Houston; Ed Soltero, Assoc. AIA, El Paso; Dennis W. Stacy, AIA, Dallas; Dan Wigodsky, AIA, San Antonio; Bill T. Wilson II, AIA, Corpus Christi

**Contributing Editors** 

David Dillon, Dallas; Stephen Fox, Houston; Douglas Harvey, San Antonio; Nestor Infanzón, AIA, Dallas; Lila Knight, Austin; Barbara Koerble, Fort Worth; Gerald Moorhead, FAIA, Houston; Willis Winters, AIA, Dallas; David Woodcock, FAIA, RIBA, College Station

### TSA Officers

Tommy Cowan, AIA, Austin, President, Randy Gideon, AIA, Fort Worth, President-Elect; Jan Pittman Blackmon, AIA, Dallas, Vice President; Donna Carter, AIA, Austin, Vice President; Frank Douglas, FAIA, Houston, Vice President; Gabriel Durand-Hollis, AIA, San Antonio, Vice President; R. Nolen Willis, AIA, Houston, Treasurer; Brice Davis, AIA, Longview, Secretary: David Lancaster, Austin, Executive Vice President

TSA Board of Directors by Chapter

James H. Wheeler, FAIA, Abilene Chapter; Gregg Bliss, AIA, Amarillo Chapter, John Nyfeler, AIA, Austin Chapter; Charles Graham, AIA, Brazos Chapter; Jerry Kramer, AIA, Corpus Christi Chapter; Ronald Shaw, AIA, Dallas Chapter; Leonard Nordell, AIA, El Paso Chapter; Aubrey Hallum, AIA, Fort Worth Chapter; Natalye Appel, AIA, Houston Chapter; Rolando Garcia, AIA, Lower Rio Grande Valley Chapter; Michael E. Atcheson, AIA, Lubbock Chapter; Duane Meyers, AIA, Northeast Texas Chapter; Gregory M. Davis, AIA, San Antonio Chapter; Dohn LaBiche, AIA, Southeast Texas Chapter; Michael Marrs, AIA, Waco Chapter; David Wayland, AIA, West Texas Chapter; Dick Higgins, AIA, Wichita Falls Chapter; Jim C. Doche, FAIA, Amarillo, and Ronald Skaggs, FAIA, Dallas, AIA Directors; Lee Roy Hahnfeld, FAIA, Fort Worth, TAF Chairman; Martin Harms, AIA, Lubbock, Educator Member; and Lewis Wright, Austin, Public Member

Second-class postage paid at Austin, Texas, and additional mailing offices. Postmoster: Send address changes to Texas Architect, 114 West Seventh, Suite 1400, Austin, Texas 78701. Phone: (512) 478-7386. Printed in the U.S.A.

Subscription price is \$16 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. Texas Architect is indexed by the Avery Index of Architectural Periodicals, available in major libraries.

# A New Year

A FUNNY THING happened on the way to putting this issue together: It grew. We had planned for a typical January/February issue, with a typically small number of advertisements, since all magazines in every genre shrink in the month after Christmas. With uncomfortable regularity, our advertising sales for January have run about 30 percent lower than sales for most other issues of the year.

Nevertheless, we had decided that, for once, we would allow ourselves plenty of room in our feature well, taking advantage of the quirk of pricing that makes a 16-page signature-the chunks of four, eight, or 16 pages required for printing-cost only microscopically more than one of four pages. Last year's

feature well was 14 pages, but this year's would be a luxurious 22. We talked with architects, photographers, and others about possible projects, and made our selections from what was clearly an abundance of possibilities.

As things came together, however, the empty pages started filling up. With ads. Soon there was barely room for News, and Survey was getting squeezed. Finally, we had to add another eight-page signature to accommodate the advertisers who wanted in. We ended up with a January issue almost 50 percent bigger than a normal issue and more than twice as big as a typical issue for January.

There are many possible explanations. Perhaps good work from Associate Publisher Mark Denton and from our advertising sales representatives Carolyn Baker and Ray Don Tilley? Certainly they worked hard

and well, but then they always do. Perhaps increased strength in the building economy in Texas and a desire by advertisers to reach a growing market? Again, certainly true, but not a sufficient explanation for an advertising bulge in January.

The answer is our issue theme-corrections architecture. A billion-dollar construction boom in a little over two years is a great incentive. Even greater is the fact that another billion in construction is planned before the end of the century. Advertisers want to reach the architects who will be planning and specifying the resulting projects. The reasons behind this boom are reported by Marc Brewster and Bob Sims in one of our features, and the long-term ramifications of the Texas and national prison-building expansions are described by Barbara Nadel in another. A portfolio of projects follows.

As editor of TA, I am of course happy to benefit from some of the fallout. But there's some cognitive dissonance, too. Here's hoping that this boom won't be repeated for another hundred years or so. Joel Warren Barna

### **UPCOMING ISSUES:**

We invite submissions to Texas Architect for all our upcoming issues. Scheduled issue themes for 1995 include

MAY/JUN '95 (deadline 16 Feb) "Medical Architecture" JULY/AUG '95 (deadline 16 Apr) "Affordable Housing"

We also need stories about new architectural projects, interiors, historic preservation, urban design, zoning, mass transit and highway development, competitions, and education for our NEWS and SURVEY sections. In addition, we are looking for stories about innovations in technique and management for our SMALL PRACTICE ISSUES section.

If you can help with any of these topics, please call Texas Architect at 512/478-7386 or fax at 512/478-0528 JWB



# 1,000 QUAKES

Over 1,000 quakes above 3.0 on the Richter Scale were recorded in the Western U.S. since January 17, 1994. Mortars made with Type S lime are part of the reason why damage to modern masonry structures was minimal. In the West, mortars containing Type S lime are code-approved for seismic zones 2, 3 and 4. The reason...high bond strength to resist lateral movement.

Chemstar Type S Lime helps "grab" brick and block, making it your best bond insurance against wall damage. Not just in regions subject to quakes or high wind loads, but anywhere structures are built to last. Chemstar Type S Lime is available in the West, Southwest, Texas and Western Canada. For sales or technical information about Chemstar Type S Lime, call (800) 274-8977.



# **ALAMO CEMENT**

ALAMO CEMENT is proud to have been selected to provide the foundation for the San Patricio County Juvenile Center in Sinton-One more example of how architects and contractors have been relying on Alamo's expertise for over 114 years. Call today to put this experience to work on your next project.

Alamo Cement 6055 West Green Mountain Rd. San Antonio, TX 800/292-5510

The reliable brand since 1880 Circle 78 on the reader inquiry card

# ON THE MARK ...IN TEXAS

MARK CORRECTIONAL SYSTEMS, the nation's leading manufacturer of modular steel cells, welcomes Texas architects to the ACA Winter Conference '95 in Dallas.

Come by and see our cell on display at Booth 512 in the exhibit hall. See for yourself how structural technology and design innovation are providing fast, cost effective answers for today's challenging corrections marketplace.

Proven Solutions for the most demanding correctional environment. On the Mark...in Texas and in applications throughout the United States: Mark Correctional Systems.

John H. Shanahan, Jr., Assoc. AIA President Maywood, New Jersey 800/835-6275

Dick Hurley, CDT, CSI Texas Representative Houston, Texas 800/287-8245

Circle 107 on the reader inquiry card

# Think you need steel, concrete, or stone for durability? Think again. NATIVE TEXAS WOODS are nature's beautiful industrial workhorses.



In construction today, the traditional heavyweights and tough performers have been surpassed. Now there are Native Texas Woods. They have been in our midst for centuries. They are the renewable alternative to endangered species. They are even newly affordable through advanced processing methods. Native Texas Pecan, in two distinct varieties, is twice as strong as Oak and suitable for factory flooring. Dense Loblolly Pine serves as the strongest economical beam, in structural spans up to 50 feet. Inch-thick Tidewater Red Cypress can even replace inch-and-ahalf Cedar or Redwood, and it loves the punishment of outdoor applications. From these hard workers to Oak to decorative beauties including Native Texas Mesquite, Fiddleback Sycamore, and Texas Walnut, Native Texas Woods offer superior beauty and design flexibility and often comparable performance in high-traffic, heavy-abuse applications. They are your new creative workhorses.

Texas Kiln Products Inc. brings Native Texas Woods to you. From flooring and molding to lumber and architectural details. Many other varieties are available. We ship across the country, with careful attention to detail on each order.

Get industrial strength and beauty, direct from our Custom Mill located in the heart of the Lost Pines in Central Texas.

Circle 106 on the reader inquiry cord

# Texas Kiln Products

Call David Miller today:

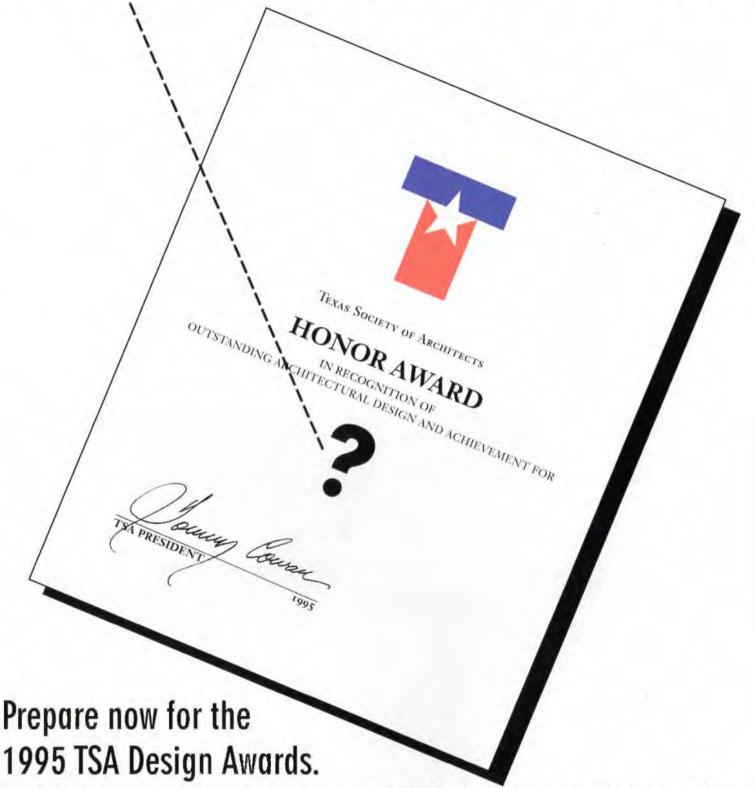
Native Texas Woods





lize all of our woods, including using computerized debu-midification kilns, computer-controlled thin-kerf band saws that can save one tree for every three diat we cut.
We also capitalize on using woods that would normally be
destroyed, delivering them to you for a new, beautiful life.

# YOUR NAME HERE



Deadline for entries will be June 2. Look for details and entry forms in the March/April issue of TEXAS ARCHITECT.

# Letters

### **Not Big Brother**

WITH ALL DUE RESPECT to John McGinty, FAIA, his essay " NCARB-Big Brother?" in the November/December 1994 Texas Architect, though well-written, seems little more than wistful longing for the so-called good old days.

Surely the NCARB is no more "an imperious bastion of faceless rule makers" than the fifty state bureaucracies it attempts to unify. And, it does serve a useful purpose in a country where architects must seek separate licenses for every state in which they wish to practice. The fault lies not with the NCARB but with the notion that the States alone can license architects and other design professionals. Granted, the system is far from perfect and much too expensive, but the goal of uniformly administered standards for those wishing to be titled architect cannot be wrong in this complex and transitory age.

One more point. The use of NCARB after one's name is no more "wrongheaded or misleading" than the use of AIA, or for that matter. FAIA. After all the same argument could be made that the initials AIA, and especially, FAIA must suggest to the public that an architect has a national license or some higher level of professionalism. The last time I checked, membership in the AIA was not a requirement for architectural registration or a guarantee of higher levels of professionalism.

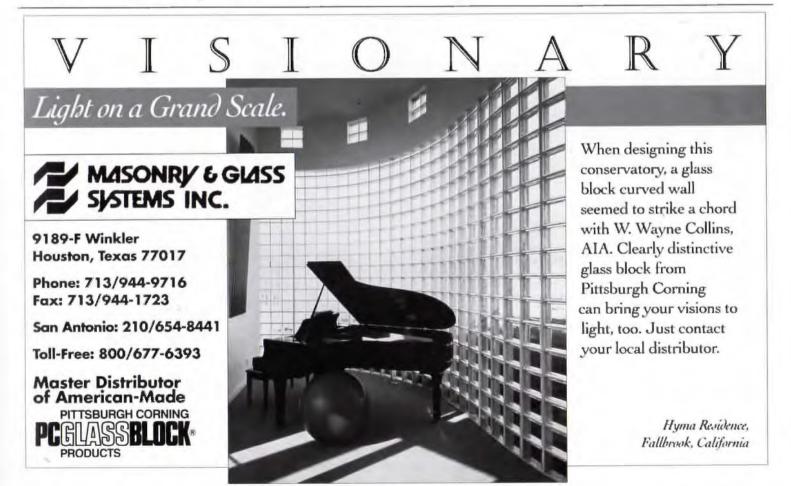
Regardless of the registration system used, good, bad, and mediocre architects will always be with us, as is the case with all professions. Let's concentrate on making the present system more efficient and productive, not on debating the merit of various initials and titles.

> Leonard G. Lane, AIA, NCARB, etc. Design Principal, Chelsea Architects Houston

CORRECTION: The attribution of credit for the Science Spectrum and Omnimax theater in Lubback (see "Survey," Nov/Dec 1994 TA, p. 59) was incorrect.

Joe D. McKay, AlA, Architect of Lubbock was architect of record; Michael Peters, Architect, of Lubbock was design architect. Roberts and Thoma was structural engineer; Fanning, Fanning and Associates was mechanical and electrical engineer; and Parkbill, Smith and Cooper was civil engineer. Merrick and Company was acoustical consultant.

CORRECTION: The credits for the SM Xiamen Mixed-Use Development project by Meckfessel Associates of Dallas (see "Practicing in Asia," in TA, Nov/Dec 1994, pp. 42-45) should have included Philip H Recto Architects, Manila, Philippines, and The Fifth Institute, Beijing/Xiamen, China, who are acting as local architects for the project.



Circle 10 on the reader inquiry card

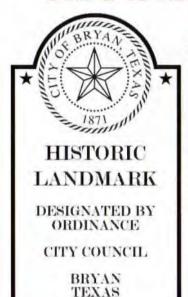
# The Security Innovation That's Architecturally Aesthetic!

If your project requires superior perimeter security, and aesthetics are also of major concern, FIRST DEFENCE is the solution. Our engineers didn't stop when they came up with a fence design that is so unique it could be patented. We found that maximizing security can be combined with an attractive appearance. Call us for more information on how we can meet your specs and your budget.

Circle 82 on the reader inquiry card

1-800-849-4791

# OMC is Making History



1995

- · Our skilled craftsmen combine the old world of sand casting with modern technology, to create beautiful bronze, aluminum and brass pieces.
- · A cast plaque, letter or logo implies permanence, style and dignity... in today's world as well as tomorrow's.
- . So when you want to make your mark in history, remember OMC.

### TRY US FOR YOUR CAST LETTERS. PLAQUES AND LOGOS!

- · Quick lead times
- · Outstanding quality
- · Superb customer service

CALL FOR FREE LITERATURE 1-800-488-4662



P.O. Box 3188 Bryan, Texas 77805 409-779-1400 Fax 409-779-4900

Circle 22 on the reader inquiry card

For more information, visit one of the centers listed below, or circle 4 on the reader inquiry card.



# Marvin Windows **Planning Center**



AUSTIN BRYAN/COLLEGE STATION TEMPLE/BELTON Denton Dr., #109 Austin, Texas 78758 800/333-9203 512/835-9203 Attn: John Faulkner

DALLAS WACO

2619 Lombardy Lane Dallas, Texas 75220 800/888-3667 214/351-1186 Attn: David Faulkner

FORT WORTH

5801 Curzon, Suite 1F Fort Worth, Texas 76107 800/955-9667 817/737-8877 Attn: Charles Allen

LONGVIEW TYLER

1707 Loop 281 West Longview, TX 75604 800/288-3667 903/759-9675 Atm: Lonnie Robinson

LUBBOCK Frontier Wholesale Co.

833 East 40th Lubbock, Texas 79404 800/444-3667 806/744-1404 Attn: David Thompson

TULSA

6922 S. Lewis Tulsa, Oklahoma 74136 800/283-6352 918/481-6352 Attn: Tom 8raswell

OKLAHOMA CITY

114 E. Sheridan, B-102, Bricktown Oklahoma City 73104 800/766-4690 405/235-5633 Attn: Gary Dawson



### HOUSTON

Lone Star Plywood & Door Corp.

16001 Tomball Parkway Houston, Texas 77086 800/934-3502 713/440-9090 Attn: Trisha Laird

Beaumont/Port Arthur 800/934-3502

Bryan/College Station 800/934-3502

FISHER MILLWORK'S

# home design center

A SELECTION STUDIO

### SAN ANTONIO

Fisher Millwork's Home Design Center

6450 Camp Bullis Rd. San Antonio, Texas 78257 1-800-699-0914 210-698-0914 Attn: Kevin Avres

### CORPUS CHRISTI / LAREDO

3636 S. Alameda, Suite I-2 Corpus Christi, TX 78411 512-814-7000 Attn: Matt Menard

### McALLEN / BROWNSVILLE

4206 North 23rd St. McAllen, TX 78501 1-800-288-9464 Attn: Dennis Smith

### KERRVILLE / FREDERICKSBURG

1-800-669-0914 Attn: Jeff Long

# **COUNT ON MARVIN FOR CUSTOM SOLUTIONS, EVERY TIME**

Not every project is as challenging as this residence in Dallas. But Marvin is your choice, residential or commercial, big or small, for custom window solutions.

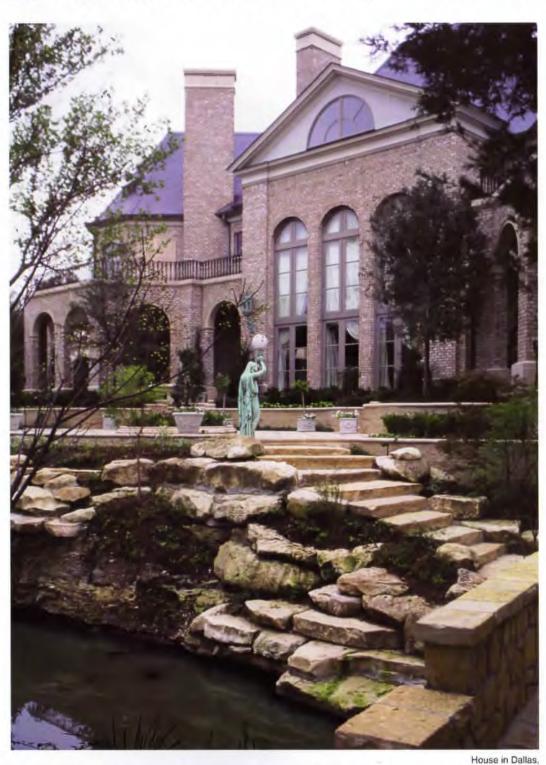
Marvin had the options to offer for the variety of shapes, sizes, and uses demanded by this complex house of over 20,000 square feet. Right down to finish. The final color was chosen, only after Marvin prepared numerous custom colors, too, for the architect and client to consider.

That shows unusual care for clients' needs and dreams. But it's not unusual for Marvin.

Innovation and service are standard with Marvin Windows, where every window is made to order. When you order a Marvin window, you'll have a lot more than just a few standard sizes and options to choose from.

Marvin makes windows in over 11,000 standard sizes and a virtually unlimited number of custom shapes and sizes, with a variety of options to suit your most specific needs. Because at Marvin, we know that the right window may even be two windows in one. Beautifully made to order, one at a time.





"Marvin Windows offers a product that successfully implements what my firm designs. This particular residence required a specific type of window for scale, authenticity, and conformance to code. Marvin's true French casement provided the answer with no deviation between initial design and finished product. Marvin's staff delivered what the owner, contractor, and I expected." — Elby S. Martin, AIA

designed by
Elby S. Martin &
Associates, Dallas
Contractor: Bob Thompson
Homes, Inc.

# News

Uptown Ornaments 14
HOUSTON The Uptown Houston
Association has decorated the
streets with a series of arches.

Funds for Parks 14
AUSTIN An \$800,000 grant will
pay for improvements to porks
on Austin's East Side.

Of Note 15

Lewisville Mavericks? 16

DALLAS The City of Dallas may build a new sports arena to keep the Dallas Mavericks from moving to the suburbs.

Calendar 17

Progress On the River 18
ROMA Work has begun on parts
of the Los Caminos Del Rio Heritage Project.

Six winners named 21
LONGVIEW Six projects were selected as winners in the AIA
Northeast Texas chapter designawards competition.

**Urban design honored** 21

DALLAS The city's Urban Design Advisory Committee named the winners of its 1994 urban-design awards.

SMALL PRACTICE ISSUES 24
America Online's design forum
may the place to look if you
need a job.

LAWS, REGS, & RED TAPE 32
Construction problems arise more from flows in process than from cutting-edge design or technology.

# **Uptown Ornaments**

HOUSTON Along with the usual holiday decorations, rows of synthetic Christmas trees, and illuminated buildings, Houston's Galleria/Post Oak district received a new set of ornaments this fall. Post Oak Boulevard between Nieman-Marcus and San Felipe Road is now lined with sleek light standards and bridged by four pairs of stainless steel arches. These glittering jewels are the most visible part of the long-term planning goals of the self-styled "Uptown Houston" district, which encompasses an area from Richmond Avenue north past San Felipe Road and from the West Loop west to Sage Road.

Working with the late O. Jack Mitchell, then dean of the Rice University School of Architecture as consultant, business interests in the area banded together in 1975 to find solutions to problems of rapid growth and to encourage continued economic development. In 1986, the Uptown Houston Association was formed to coordinate planning for the 350-acre district. Legislation passed by the state in 1987 created Harris County Improvement District No. 1; the law allows property owners to tax themselves to pay for programs and improvements and to issue bonds funded by those assessments.

The Uptown Comprehensive Improvement Plan provides for roadway and other

# SAN FELIPE SAN FELIPE LYNN GRESCOM WALABAMA WA Aerial Gateways Arches ond Gardens

traffic improvements, new sewer and water capacity, improved public safety, and a unified sense of place and identity. Many of the infrastructure items have been completed and the streetscape program, budgeted at about 15 percent of the total cost of the Improvement Plan, should be completed by late 1995.

The main objective of the streetscape program, designed by Communication Arts of

# **Funds for Parks**

AUSTIN A grant of \$800,000 awarded jointly to an Austin parks-advocacy group and a national land-conservancy organization will be used to improve the condition of urban parks in Austin's lower-income neighborhoods east of IH-35. The grant by the New York Citybased Lila Wallace-Reader's Digest Fund is part of a \$14-million initiative to support expansion of urban parks across the country, particularly in underserved neighborhoods, according to Susan Messina of the Wallace Fund. Austin was one of seven cities that received funding in the first round of the Urban Parks Initiative. The other cities were Baltimore, Boston, Cleveland, Oakland, Portland, Ore., and Providence, R.I.

In each case, the grants will be shared by a local organization—in Austin, the Austin Parks Foundation—and the Trust for Public Land, a national nonprofit land conservation group. The grant money will not be used to purchase park land but to plan and run community park programs and to pay for improvements to existing parks and on-going maintenance. The funds will also give local groups, like the Austin Parks Foundation, leverage for raising additional funds, Messina says.

The Austin Parks Foundation is currently working on several projects for which the Wallace Fund grant-\$100,000 a year for four years-will be used, says Paula Fracasso, APF executive director. The first is in the Montopolis neighborhood, just south of the Colorado River in East Austin, where the group is working to add at least four baseball fields at the Montopolis Sports Complex. The foundation is also working with the Trust for Public Land to develop an adjacent 364-acre tract that runs from Longhorn Dam to the Montopolis Bridge along the south side of the river. The planned park would be similar to-but larger than-Austin's muchloved Zilker Park, including things like hikeand-bike trails, multi-use sports fields, a canoe launch, playgrounds, and other facilities,





Map shows Uptown Houston improvements (opposite); a pair of arches on

Post Oak Blvd.; (top); rendering of one of the pocket parks (above)

Boulder, Colo., and budgeted at \$10.4 million, is to define the district with a "memorable image." In addition to the light posts and arches now in place, six major "gateway" inter-

Fracasso says. Portions of the tract are owned by the City of Austin, while other parts are currently owned by the Trust for Public Land. According to Fracasso, it will be six to eight years before all 364 acres can be developed and placed into use.

The foundation is also working on a plan to develop and improve four parks in East Austin. Only one site has been selected-a 14-acre tract in the Meza neighborhood called Springdale Park, which has been owned by the city for 10 years, but which is completely undeveloped, says Fracasso. Three other parks will be selected from among the many in East Austin whose equipment and facilities are damaged by age and neglect. "What we're looking for is neighborhood involvement, an existing neighborhood structure that has taken an interest in its parks," Fracasso says.

The Austin office of the Trust for Public Land plans to use its half of the Wallace Fund grant to pay for the transaction costs-surveys, appraisals, environmental studies, legal

sections will be marked by stainless steel rings-40 feet in diameter-hung from 55-foot tapered masts. Tiny parks will anchor the bases of each arch, creating a sequence of "happenings" along the

sidewalks of Post Oak that should make perambulation of the boulevard a real treat.

Despite the high hopes and ample expenditure, the visual success of the objects in place so far is compromised by the inability of the Improvement District to control the design of structures on private property (the District actually consists of only the public right-of-way). The jumble of different parking-lot light poles competes with the new street lights; ordinary city traffic signs will also remain. In the context of fast traffic and highrises, the arches could be bigger. However, the intersection-marking ring assemblages may help to increase the scale and cohesion of the ensemble. Gerald Moorbead

Gerald Moorbead, FAIA, is a Texas Architect contributing editor.

fees, and staff costs-involved in putting together deals like the one it just finalized for the 364-acre Montopolis park, says Tim Wirth, TPL Texas field director. In that case, the Trust acquired four parcels of land needed to complete the tract and has worked out a lease/purchase arrangement with the city that will allow the park to be developed while the city is buying the land back from the Trust.

The second round of Wallace Fund grants will be announced next year, Messina says. Those grants will go to larger cities, but with the same purpose: improving urban parks as a way of building a sense of community and enhancing the cultural life of the city.

The Austin Parks Foundation was organized by a group of citizens who, with a decline in city parks funding, saw a need for a non-politicized advocate for parks in the city, Fracasso says. "We want to develop support for public green spaces, both neighborhood parks and larger areas. We're hoping for a long-term relationship with the city. This is just the beginning." Susan Williamson

# OF NOTE

AIA honors Texas project Cibolo Creek Ranch in Shafter by Ford, Powell & Carson Architects of San Antonio was selected as one of 25 winners in the 1995 American Institute of Architects Honor Awards program. The project, which also won a 1994 TSA Design Award (see TA, Sept/Oct 1994, pgs. 40-41), involved restoration of a 19th-century frontier fort and construction of a 12,000-square-foot addition.

Books by Texans published REFLECTIONS OF FAITH: HOUSES OF WORSHIP IN THE LONE STAR STATE by the late Willard B. Robinson has been published by Baylor University Press. Robinson was the Paul Whitfield Horn Professor of Architecture at Texas Tech University. Also published was FOUNDATIONS IN AR-CHITECTURE: AN ANNOTATED ANTHOL-**OGY OF BEGINNING DESIGN PROJECTS** (Van Nostrand Reinhold) by Owen Cappleman and Michael Jack Jordan. Cappleman is an associate professor of architecture at the University of Texas at Austin.

### A Joint Venture

The colleges of engineering and architecture at the University of Houston have signed an exchange agreement with the faculty of engineering at Chiba University in Japan. The agreement calls for exchange of faculty and students as well as future joint research projects.

Texas home ownership lags nation In 1993, Texas ranked 44th among the 50 states in rate of home ownership, according to the Real Estate Center at Texas A&M University. The Texas rate was 59.3 percent, five percentage points less than the national average.

# RTKL in Red Square

RTKL's Dallas office will be part of a team designing a five-year plan to redevelop the GUM department store on Red Square in Moscow.

# Lewisville Mayericks?

**DALLAS** Faced with the possibility of losing the Dallas Mavericks basketball team to the suburbs, the Dallas City Council has been discussing construction of a new arena to replace the team's current downtown venue, Reunion Arena.

In early December, Mavericks owner Don Carter said that his team was leaving Reunion Arena, although no time frame was disclosed. In November, Carter bought 95 acres of land in Lewisville and the city of Lewisville in December unveiled a proposal for an arena to be built on that site. Both the Mavericks and the Dallas Stars hockey team, which also plays at Reunion, are interested in a new facility with more of the revenue-producing luxury suites than are available at Reunion Arena. Several suburban cities, including Lewisville, Irving, and Arlington, have offered to build such a venue if the Mavericks and Stars would agree to move.

In October, a \$500,000 Dallas city study recommended a site for a new arena just north of Reunion; under that proposal Reunion would be demolished to make way for parking for the new facility. However, in mid-November, city

WE ANCHOR THE WORLD

### LOXALL wall reinforcement and masonry accessories supplied on correctional facilities in these Texas locations:

Abilene Gatesville Amarillo Huntsville Atascacita Irving Jacksboro Beaumont Beeville Jasper Bexar County Kerr County Big Spring Liberty Bonham Livingston Dalhart McKinney Dallas Stephenville Sugarland Diboll Wichita Falls Fort Worth

Hohmann & Barnard, Inc. 2415 Cold Springs Road Fort Worth, TX 76106 817/625-9781 • 817/626-3819 (fax)

Circle 90 on the reader inquiry card

officials changed course and recommended the site ranked number two by the study: southeast of Reunion and adjacent to the recently expanded Dallas Convention Center.

The central question that remains unanswered is how a new arena—with an estimated cost of \$142 million—could be financed. The debt has not yet been retired on the 15-year-old Reunion Arena and the City Council has re-

jected any taxpayer-supported general fund expenditures; one proposal is to use revenue bonds, which would be repaid through income the city would receive from the new arena. In early December, owner Carter said that he would pay for \$65 million of the cost of a new downtown Dallas facility. Dennis Stacy

Architect Dennis Stacy practices in Dallas.





# A Tough, Durable Waterborne Epoxy System from the Company that Invented Epoxies.

Devoe invented the epoxy resin in 1947 and continues its pioneering tradition with a complete family of Tru-Glaze-WB waterborne epoxy coatings.

Tru-Glaze-WB epoxy coatings provide a tough, tile-like finish that can even be applied over old oil-based, alkyd, or latex paints to increase durability. And because they are waterborne, VOC-compliant Tru-Glaze-WB coatings produce no flammable fumes during application or drying.

# **Tru-Glaze-WB Waterborne Epoxy Coatings Offer:**

- A family of three products: Gloss, Semi-Gloss, and Primer
- · Over 800 colors
- · Simple one-to-one mixing
- · Low odor
- · High flash point
- Easy application
- · Excellent adhesion

or alkyd enamels

- No lifting or wrinkling over oil-based
- · Soap and water clean-up
- Hard, tile-like finish
- · High scrubbability
- · Abrasion resistance
- Stain resistance
- · Chemical and solvent resistance
- VOC compliant
- USDA authorized



Devoe & Raynolds Co. 4000 Dupont Circle Louisville, KY 40207 (502) 897-9861

Division of Grow Group, Inc.

# In Texas call

Jack Stout at (713)680-3377

# CALENDAR

"Elvis + Marilyn: 2 X Immortal" The first major museum exhibition to examine the impact of Elvis Presley and Marilyn Monroe on American art and culture will include more than 100 works of art that explore. compare, and contrast these American icons. Contemporary Arts Museum, Houston (713/526-0773), FEB. 4-MARCH 26

**RDA Spring Programs** 

Programs include a symposium, "Modern Preservation: Back to the Future," that will assess the impact of modernism on Houston and explore issues of preservation of modern landmarks. Also scheduled is a series of lectures focusing on the work of practicing architects from ground the world who continue the search for modernity, including Mark Mack, Markku Komonen, and Françoise-Helene Jourda. The Rice Design Alliance, Houston (713/524-6297), SYMPOSIUM, JAN. 25; LECTURES, WEDNESDAYS, FEB. 22-MARCH 29 (EX-CEPT MARCH 22)

### "The Juice"

This competition asks for a design for an urban memorial park to victims of violent crime on a site in central downtown Los Angeles. First prize is \$10,000; an exhibition will be mounted in fall 1995. THE END (P.O. Box 1332, Culver City, Calif. 90232; call/fax 213/296-6226), PRO-GRAM AVAILABLE: JAN. 1; SUBMISSION DEADLINE: MAY 31

### **Twombly Retrospective**

As part of this touring exhibition of the work of Cy Twombly, organized by the Museum of Modern Art in New York, the Menil Collection will open a new building, the Cy Twombly Gallery, designed by Renzo Piano. The exhibition includes more than 50 of Twombly's paintings, over 40 works on paper, and a dozen sculptures. The Menil Collection, Houston (713/525-9400), FEB. 10-MARCH 19

International Conservation Training A course in architectural conservation to be taught in Rome in early 1996 is open to American preservationists. International Centre for the Study of the Preservation and Restoration of Cultural Property (Stephanie A. Woronowicz, 202/606-8516), APPLICATION DEADLINE: FEB. 15

"Tomb Treasures from China" Life-size terracotta figures from the tomb of the first emperor of China, created in the second century B.C., are the centerpiece of this exhibition, which also includes gold, silver, and other objects from the tomb. Kimbell Art Museum, Fort Worth (817/332-8451), THROUGH FEB. 12

Stephen D. Sprowls, CPCU President PROFESSIONAL LINES UNDERWRITING SPECIALISTS, INC. We've been aroundthrough boom and bust, since 1981, providing continuing professional advice and support to help you manage the risks of your profession. TSA's source for professional liability insurance. Professional Lines Underwriting Specialists, Inc. 4201 Bee Caves Road, Suite C-202 Austin, Texas 78746 (512) 328-8395 1 (800) 880-1019 Fax (512) 328-8121 Circle 12 on the reader inquiry card



# **Progress On the River**

**SOUTH TEXAS** The Los Caminos Del Rio Heritage Project, a program linking cities and historic sites along 200 miles of the Rio Grande River from Brownsville to Laredo (see *TA*, August 1991, Jan/Feb 1993, and Sept/Oct 1993), has become a model for other programs being developed in Texas, Arizona, and California.

Progress on the Los Caminos project, a joint venture of the Texas Historical Commission and Mexico's Sectretariat of Tourism, includes restoration of buildings in Roma, now designated a National Historic Landmark; a training program in Roma for construction professionals offered by the Conservation Fund; installation of highway signage and interpretive materials; acquisition of the Palo Alto Battlefield, a National Historic Landmark, by the National Park Service; and preservation of Los Ebanos International Ferry, the last surviving hand-operated ferry along the Rio Grande. Two Los Caminos projects received ISTEA funds in December from the Texas Department of Transportation: The Roma International Bridge, the last such suspension bridge over the Rio Grande, will be rehabilitated with a grant of \$1.5 million and matching funds from the Mexican government, while the 1906 irrigation pumphouse in Hidalgo received \$900,000 for its restoration. In addition, a National Heritage Area designation is being pursued for the project in its entirety.

The Texas Historical Commission recently published the second edition of its award-winning book documenting the Los Caminos project, A Shared Experience: The History, Archi-



Arched courtyard wall of the Antonio Sáenz residence (1884) in Roma, being restored as part of the Los Caminos Del Rio Heritage Project

tecture and Historic Designations of the Lower Rio Grande Heritage Corridor. The second edition includes new chapters on the cartography of the area and on the city of Guerrero Viejo. In addition, a teacher's companion book (for grades 6–8) interprets the heritage of the Lower Rio Grande for students of the area. Lila Knight

Lila Knight is a Texas Architect contributing editor.

A Shared Experience is available from the Texas Historical Commission (\$40 bardback, \$25 paper), P.O. Box 12276, Austin 78711 or 512/463-5754. The Teacher's Companion is available for \$10.



# ARE YOU COVERED??

Don't get caught with too little too late. Contact the TSA insurance professionals — Toni or Robbie — by calling 1-800-854-0491 toll free.

- · Workers' Compensation for Design Professionals Only
- · Health Insurance Options PPO, Indemnity, Preventive Care, and More
- Stand Alone Plans, including Dental/Orthodontia, Life/AD&D, Business Travel, Short Term Disability, etc.



TSA Trust

Circle 11 on the reader inquiry card



Circle 13 on the reader inquiry card

# To Receive Free Product Information

Take advantage of additional information available about products and services advertised in this issue of TEXAS ARCHITECT. Simply fill out the information requested on the adjacent Reader Inquiry Service Card, detach it, and drop it in the mail, postage-paid. We will forward your requests to our advertisers immediately.

# **Build Your Collection**

Complete and return the adjacent postage-paid subscription card to receive every issue—all six regular issues, plus a bonus seventh issue, if you prepay. And save at least 13% off the cover price!

### MEMBERSHIP INTEREST CARD Tell me more about TSA/AIA! Please contact me about the services and benefits of joining the Toxos Society of Architects / American Institute of Architects TEXAS SOCIETY Chapter (If known) OF Abliene Title/Position Amaritie Austin ARCHITECTS Firm/School - Bruzos Corpus Christi Type of firm Dailes El Paso Busn Address Fort Worth Hauston City/State/Zip Lower Rio Grande Valley Phone Number ☐ Hortheast Texas Sen Antonio Fax Number Southeast Texas **Home Address** West Texus Wichita Falls ESTABLISHED

1939

| SUBSCRIPTION ACTION CARD Save by  | y Subscribing to 1A   |
|---|---|
| Stort my sevings with the next issue of Tenas Accustect Please enter my subscription for the terms I've murked helow:                       |   |
| 1 year, 6 issues, \$21 13% off cover (Foreign: \$55/yr., U.S. funds) 2 years, 12 issues, \$38 21% off the cover                             | Primary husiness/industry (check only one):   |
| Student rate, one-year, \$15 58% off the cover  | Architecture or A/E firm Engineering firm Architectural design                                    |
| Pryment seclosed. One free issue on a one-year subscription, 7 in all; or TWO free issues on a two-year subscription, 14 in all.  Bill one. | (not headed by reg. architect)   Interior design   Landscape architecture   Contractor or builder |
| Name  | Government Commercial/Industrial/Institutional College personnel or library                       |
| Firm/School   | Architecture student Public library, professional club, society, or trade association             |
| Type of firm  | Supplier of building or interior furnishing products Other allied to the field                    |
| Mail Address City/State/Zip   | Please specify:   |
| Billing Address (if different from above)   | If you are a registered architect, in which state(s) are you registered?                          |

# FREE PRODUCT INFORMATION Reader Inquiry Service

|      |      |        |      |     |      |       |       |       |         |       |            |      |      |      |      |      |       |        |       | The second secon |    |
|------|------|--------|------|-----|------|-------|-------|-------|---------|-------|------------|------|------|------|------|------|-------|--------|-------|--|----|
| Pied | 16 1 | end    | free | inf | orm  | olie  | n (1) | 1001  | the     | pro   | duct       | 5 8/ | d si | sca) | es   | irel | ed I  | iel 01 |       | Please check the appropriate bases below:  |    |
|      |      | H      | ame  | · [ |      |       |       |       |         |       |            |      |      |      |      |      |       |        |       | Job Function: 🔲 Intern Architect   |    |
| F    | rm/l | (amp)  | pany | Ē   |      |       |       |       |         |       |            |      |      |      |      |      |       |        |       | Owner/Principal Designer Manager/Dept. Head Interior Designer  |    |
|      |      | Add    | resi | ·   |      |       |       |       |         |       |            |      |      |      |      |      |       |        |       | Stoff Architect Engineer Project Monager Client  |    |
| (    | ity/ | itan   | /Lig | ,[  |      | Ξ     |       |       |         |       |            |      |      |      | Ξ    | Ξ    |       | Ξ      |       | Do you write or approve product specifications?  |    |
|      |      | Pos    | tio  | . [ |      |       |       |       |         |       | _          |      |      |      |      |      |       |        |       |  | į  |
|      | Tr   | lepi   | honi | Ē   |      |       |       |       |         |       |            |      |      |      |      |      |       |        |       | Type of Business.  Architectural or A/E Firm   | ١  |
| Bloo | se c | ivela  |      | _   | nda  | e la  | nair  | W 01  | e en la | est e | ¥-         |      |      |      |      |      |       |        |       | Consulting Engineering   | Ī  |
| 7181 | 36.7 | 3 8.15 | -    |     | - A  | . 100 | 4411  | 1 111 | 16      | 11    | 12         | - 11 | 11   | 15   | 14   | 17   | 10    | 10     | 70    | Cammercial Industrial or Institutional   |    |
| ١,,  | 22   | 73     | 74   | 25  | 74   | 37    | 21    | 19    | 30      | 81    | 37         | 53   | 14   | 33   | 56   | 37   | 34    | 39     | 40    | Government Agency  | L  |
| 81   | 47   | 43     | 44   | 45  | 14   | 47    | 48    | 49    | 50      | 51    | 52         | 53   | 54   | 55   | 58   | 57   | 58    | 59     | 80    | ☐ Interior Design  |    |
| 61   | 82   | 63     | 44   | 43  |      | 47    | 48    | 49    | 78      | 71    | 72         | 75   | 74   | 75   | 74   | 77   | 78    | 79     | 90    |  |    |
| 81   | 82   | 83     | 84   | 85  | 88   | 67    | 88    | 11    | 10      | - 51  | 12         | 93   | 91   | 95   | 96   | 47   | 98    | 99     | 100   | Information Reeded for   |    |
| 101  | 103  | 103    | 104  | 195 | 106  | 107   | 100   | 109   | 110     | 111   | 112        | 112  | 114  | 115  | 118  | 1117 | 118   | 119    | 170   | Current Project New Suilding   |    |
| 121  | 122  | 123    | 124  | 125 | 116  | 127   | 128   | 129   | 130     | 131   | 132        | 135  | 134  | 135  | 136  | 137  | 130   | 139    | 1000  | Future Project Remodeling  | ı  |
| 141  | 142  | 145    | 144  | 145 | 148  | 147   | 148   | 147   | 150     | 151   | 157        | 153  | 154  | 155  | 156  | 11/7 | 158   | 159    | 1000  |  | ı  |
| 161  | 167  | 145    | 105  | 165 | 164  | 167   | 143   | 149   | 170     | 121   | 153        | 173  | 174  | 113  | 176  | 127  | 171   |        | 100   | Type of Contact Requested:   |    |
| 121  | 18.2 | 185    | 104  | 185 | 188  | 167   | 188   | 189   | 190     | 191   | 192        | 193  | 194  | 195  | 196  | 197  |       | 199    | 444   | Have your representative call me   |    |
|      | 107  |        |      |     |      |       |       |       | 210     | 211   |            |      |      |      |      |      |       | 219    | ~**   | Send more detailed technical information.  |    |
|      |      |        |      |     |      |       |       |       |         |       | 237<br>257 |      |      |      |      |      |       |        |       | Send samples or demonstration package.   |    |
| _    | _    | _      | _    |     |      |       |       |       |         | _     |            |      | _    |      | _    |      | _     |        |       |  |    |
| ш    | MOI  | ild a  | 150  | (Ac | 10.5 | ubse  | ribe  | ta l  | 1111    | Air   | simi.      | CI.  | (ED) | e u  | II m | 0 (5 | Z 176 | 1551   | ies l | Cord expires March \$1, 1996. January/February 1995 issu   | 10 |

# FREE PRODUCT INFORMATION Reader Inquiry Service

|  |  | H   | ame   | L  |   |   |  |   |  |   |   |  |   |  |  |  |   |  |   |
|--|--|---|---|--|---|---|--|---|--|---|---|--|---|--|--|--|---|--|---|
| FI                                       | rm/l   | om  | pany  | F  |   |   | _  |   |  |   |   |  | _   |  |  |  |   |  |   |
| Address                                  |  |   |   |  |   |   |  |   |  |   |   |  |   |  |  |  |   |  |   |
|  |  | Aun   | 162   | L  | _   |   |  | _   | _  |   |   | _  |   | _  |  |  |   |  |   |
| C  | 114/5  | inte  | e/Zij   | r  |   |   |  |   |  |   |   |  |   |  |  |  |   |  |   |
|  |  |   |   | -  |   |   | _  |   |  |   |   |  |   |  |  |  | -   | _  |   |
|  |  | Pas   | itio  | L  |   |   |  |   |  |   |   |  |   |  |  |  |   |  |   |
|  | T  | dan   | honi  | ī  | _   | _   | _  | _   | _  | _   | _   | _  | _   |  |  |  |   |  | _   |
|  | -  | tep   | W ALL   | L  |   |   | _  | _   |  |   |   |  | _   |  |  | _  |   |  | _   |
|  |  |   |   |  |   |   |  |   |  |   |   |  |   |  |  |  |   |  |   |
| lea                                      | 10 C   | lecli   | 701   | IE 11  | rode  | r is  | quir   | y ni  | mb   | eris  | 1:  |  |   |  |  |  |   |  |   |
| lea<br>1                                 | 10 C   | lecli<br>3  | 4   | 5  | rode  | r is  | quir   | y ni  | 19   | erts  | 17  | 13   | 14  | 15   | 14   | 17   | 10  | 19   | 20  |
| 1 21                                     | 10 C   | lechi<br>3<br>13                                      | 4<br>24   | 5<br>75  | eudi<br>4<br>26                                 | 1 11  | quir<br>E<br>76                                  | y na  | 19   | 11  | 17<br>32  | 33   | 34  | 35   | 14<br>34                                   | 37   | 10 30   | 19   | 45  |
| 1  | 7  | 3   | 4   | 5  | *   | 1   | quir<br>26<br>43                                 | 9   | 19   | 11<br>31<br>51  | 17<br>32<br>52  | 33<br>51   | 7.75  | 35<br>35   | 56   | 37<br>57                                   | 50  | 59   | 45<br>60  |
| 1 21                                     | 22   | 3<br>13   | 4 24  | 5<br>75  | 26  | 17  | 28<br>28   | 29  | 19   | 11  | 12<br>32<br>52<br>72  | 33   | 34  | 35   |  | 37   | -   | -  | 45<br>60<br>08  |
| 21<br>41<br>41<br>81                     | 22   | 3<br>13   | 4 24  | 5<br>75<br>45  | 4<br>26<br>44                                   | 17<br>17<br>41  | 26<br>28<br>43<br>66<br>85                       | 90<br>90<br>90<br>90  | 19<br>30<br>30<br>70<br>90                             | 11<br>31<br>51  | 12<br>32<br>52<br>72<br>92                                    | 53<br>51<br>73<br>#3   | 34<br>54  | 35<br>35<br>75<br>95   | 56   | 37<br>57                                   | 50  | 59   | 45<br>60<br>08<br>100   |
| 1<br>21<br>41<br>41<br>81<br>81          | 27<br>27<br>42<br>62   | 3<br>13   | 4 24  | 5<br>75<br>45<br>45  | 4<br>26<br>44                                   | 17<br>17<br>41  | 26<br>26<br>43<br>66                             | 19<br>19<br>64  | 19<br>30<br>30   | 11<br>31<br>51  | 17<br>37<br>52<br>77<br>97                                    | 53<br>53<br>73<br>93   | 34<br>54<br>74<br>94<br>114                             | 35<br>35<br>75<br>95<br>115                                    | 56<br>76<br>96<br>114                      | 37<br>57<br>73<br>97<br>117                | 50  | 59   | 45<br>60<br>08<br>100<br>120                                    |
| 1<br>21<br>41<br>41<br>81<br>81          | 27<br>27<br>42<br>62   | 3<br>13   | 4 24  | 5<br>75<br>45<br>45  | 4<br>26<br>44                                   | 1<br>27<br>47<br>47<br>87                             | 26<br>28<br>43<br>66<br>85                       | 90<br>90<br>90<br>90  | 19<br>30<br>30<br>70<br>90                             | 11<br>31<br>51  | 12<br>32<br>52<br>72<br>92<br>112<br>132                      | 53<br>53<br>73<br>93<br>115<br>133                             | 34<br>54<br>74<br>94<br>114                             | 35<br>35<br>75<br>95<br>115<br>135                             | 56   | 37<br>57<br>77<br>97<br>117<br>137         | 50  | 59<br>79<br>99<br>111<br>138               | 45<br>60<br>08<br>100<br>120<br>140                             |
| 1<br>21<br>41<br>41<br>81<br>81          | 22<br>42<br>42<br>62<br>63                                     | 3<br>13   | 4 24  | 5<br>75<br>45<br>45  | 4<br>26<br>44                                   | 1<br>27<br>47<br>47<br>87                             | 26<br>28<br>43<br>66<br>85                       | 90<br>90<br>90<br>90  | 19<br>30<br>30<br>70<br>90                             | 11<br>31<br>51<br>71<br>71                                    | 17<br>37<br>52<br>77<br>97                                    | 53<br>53<br>73<br>93   | 34<br>54<br>74<br>94<br>114                             | 35<br>35<br>75<br>95<br>115                                    | 56<br>76<br>96<br>114                      | 37<br>57<br>73<br>97<br>117                | 50  | 59<br>79<br>99<br>119<br>139<br>159        | 45<br>60<br>03<br>100<br>120<br>140<br>160                      |
| 1<br>21<br>41<br>41<br>81<br>81          | 22<br>42<br>42<br>62<br>63                                     | 3<br>13   | 4 24  | 5<br>75<br>45<br>65<br>85<br>105<br>125<br>145<br>165        | 4<br>26<br>44                                   | 1<br>27<br>47<br>47<br>87                             | 26<br>28<br>43<br>66<br>85                       | 90<br>90<br>90<br>90  | 19<br>30<br>30<br>70<br>90<br>110<br>130<br>150<br>170 | 11<br>31<br>51<br>71<br>71<br>111<br>131<br>151<br>171        | 12<br>32<br>52<br>72<br>92<br>112<br>132<br>102               | 53<br>53<br>73<br>93<br>115<br>133<br>153<br>153               | 34<br>54<br>74<br>94<br>114                             | 35<br>35<br>75<br>95<br>115<br>135<br>155<br>175               | 56<br>76<br>96<br>114                      | 37<br>57<br>77<br>97<br>117<br>137         | 50  | 59<br>79<br>99<br>119<br>139<br>159        | 45<br>60<br>08<br>100<br>120<br>140<br>160<br>180               |
| 1<br>21<br>41<br>61<br>101<br>101<br>101 | 22<br>42<br>42<br>62<br>62<br>162<br>122<br>142<br>142<br>187  | 3<br>23<br>43<br>63<br>63<br>103<br>123<br>143<br>163 | 4<br>24<br>44<br>64<br>64<br>104<br>124<br>144<br>164 | 5<br>75<br>45<br>45<br>85<br>105<br>125<br>145<br>165<br>185 | 8<br>26<br>86<br>86<br>108<br>128<br>146<br>159 | 1<br>27<br>43<br>47<br>87<br>101<br>127<br>147<br>167 | 26<br>43<br>68<br>68<br>108<br>128<br>148<br>148 | 9<br>29<br>40<br>69<br>89<br>109<br>129<br>149<br>189         | 19<br>30<br>30<br>70<br>90<br>110<br>130<br>170<br>170 | 11<br>31<br>51<br>71<br>#1<br>111<br>131<br>151<br>171<br>191 | 12<br>32<br>52<br>72<br>92<br>112<br>132<br>132<br>137<br>197 | 53<br>53<br>73<br>93<br>115<br>153<br>153<br>173<br>193        | 34<br>54<br>74<br>94<br>114<br>134<br>154<br>174<br>194 | 35<br>35<br>75<br>95<br>115<br>135<br>155<br>175<br>195        | 56<br>76<br>96<br>114<br>138<br>154<br>176 | 57<br>77<br>97<br>117<br>157<br>157<br>177 | 56<br>78<br>98<br>118<br>138<br>158<br>178<br>198 | 59<br>79<br>99<br>119<br>159<br>179<br>199 | 45<br>60<br>03<br>100<br>120<br>140<br>160<br>180<br>200        |
| 21 41 41                                 | 22<br>42<br>62<br>62<br>102<br>122<br>142<br>142<br>162<br>187 | 3<br>13   | 4<br>24<br>44<br>64<br>64<br>104<br>124<br>144<br>164 | 5<br>75<br>45<br>65<br>85<br>105<br>125<br>145<br>165        | 4<br>26<br>44                                   | 1<br>27<br>47<br>47<br>87                             | 26<br>28<br>43<br>66<br>85                       | 9<br>29<br>40<br>69<br>109<br>129<br>149<br>149<br>169<br>109 | 19<br>30<br>30<br>70<br>90<br>110<br>130<br>150<br>170 | 11<br>31<br>51<br>71<br>71<br>111<br>131<br>151<br>171        | 12<br>32<br>52<br>72<br>92<br>112<br>132<br>102               | 53<br>53<br>73<br>93<br>115<br>153<br>153<br>173<br>193<br>213 | 34<br>54<br>74<br>94<br>114<br>134<br>154<br>174<br>194 | 35<br>35<br>75<br>95<br>115<br>135<br>155<br>175<br>195<br>215 | 56<br>76<br>96<br>114                      | 37<br>57<br>77<br>97<br>117<br>137         | 56<br>78<br>98<br>118<br>138<br>158<br>178<br>198 | 59<br>79<br>99<br>119<br>139<br>159        | 45<br>60<br>03<br>100<br>120<br>140<br>160<br>180<br>200<br>220 |

Card expires March 31, 1995. January/February 1995 Issue

Please check the appropriate hoxes below:

| Job Function:      | Intern Architect    |
|--------------------|---------------------|
| Owner, Principal   | Designer            |
| Manager/Dept, Head | 🔲 Interior Designer |
| Stall Architect    | - Engineer          |
| Project Manager    | Client              |

Do you write or approve product specifications?

Type of Business: Architectural or A/E Firm Consulting Engineering Controctor or Builder

Commercial, Industrial, or Institutional Government Agency

Interior Design

Information Maeded for Current Project Mew Building ☐ Future Project Acmodeling

Type of Contact Requested: Rave your representative coil me. Send more detailed technical information Send samples or demonstration package.

Card aspirus March 31, 1998. January February 1998 Issue

# **Architecture for Thought**

A subscription to TEXAS ARCHITECT brings you up to date and enriches your career with each new issue.

When you take advantage of our free product information service, you can build and update your reference files quickly and easily.

Send in your cards today.

# BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

# TEXASARCHITECT

114 W 7TH ST, STE 1400 AUSTIN, TX 78701-9833 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

Haddaldadllamilldalalaladladladla

114 W 7TH ST, STE 1400 AUSTIN, TX 78701-9833 NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



### 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

114 W 7TH ST, STE 1400 AUSTIN, TX 78701-9833

# BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 3149 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

# TEXASARCHITECT

114 W 7TH ST, STE 1400 AUSTIN, TX 78701-9833 NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES





# Six winners named

LONGVIEW Six projects were selected as winners in the biannual AIA Northeast Texas chapter design-awards competition. The winning projects were selected from among 28 entries by jurors Larry Good, FAIA, of Dallas; Bob LeMond, FAIA, of Fort Worth; and Gary Cunningham, FAIA, of Dallas.

Three projects were named merit-award winners in the contemporary category. They were Hodge Hall at Wiley College in Marshall by Bratz-Thacker Architects of Longview; Rusk County Library, Tatum Branch in Tatum by Bratz-Thacker Architects; and the Schwartz Residence in Dallas by the Allen/Buie Partnership of Longview.

In addition, three winners were named in the Decades Award program; the Decades Award, presented for the first time this year, honors projects that previously won AIA



Northeast Texas, TSA, or national AIA design awards. The Decades Award winners were the Allen Residence in Longview by the Allen/Buje Partnership, completed in 1980; Buford Television headquarters in Tyler by Sinclair & Wright Architects of Tyler, completed in 1978; and the Gregg County Courthouse expansion in Longview by the Allen/Buie Partnership, completed in 1982.

# Corgan leads honorees

DALLAS The City of Dallas's Urban Design Advisory Committee in November named the winners of its 1994 urban-design awards. The awards program honors projects and individuals that demonstrate a commitment to excellence in urban design. The Urban Design Awards Task Force characterized this year's winners as "projects that attempt to reclaim an area of the city where the urban fabric is in danger of decay and erosion." The group's highest honor, the George Kessler Award,









Top left: Tatum **Branch Library** 

Top right: Allen Residence

Center far left: **Greag County** Courthouse

Center: Schwarz Residence

Center right: **Hodge Hall** 

Left: Buford Television headquarters

went this year to Corgan Associates Architects of Dallas.

Four built projects were chosen to receive design awards: Pegasus Plaza, a downtown pedestrian plaza incorporating the mythology of Pegasus and the history of Dallas; Luben Plaza, an employee park and sculpture garden; the Magnolia Station residential development, a conversion of a warehouse and industrial site into a downtown residential enclave; and the State Thomas housing development program, a series of residential complexes built by a developer in the McKinney Avenue district.

The Design Awards Task Force also recognized one unbuilt project, the White Rock Lake Improvement Study, for identifying and establishing a framework for reclaiming and rebuilding White Rock Lake.

The Kessler Award, given to an individual or institution that has demonstrated longterm commitment to the advancement of excellence in urban design, went to Corgan Associates Architects, the first architectural firm to be so honored. Nestor Infanzón

Architect Nestor Infanzón practices in Dallas and chaired the 1994 Urban Design Awards Task Force.



Abuse resistant TECTUM wall and ceiling acoustic panels can

> TAKE IT!! in correctional facilities

FREE correction facility case history Bulletin No. M-42. Call or write for a copy today.



Tectum Formboard was chosen for ceilings, and Tectum wall panels for the gym and training buildings at California's Southern Maximum Security Complex. Tectum was specified for its economy, sound absorbing qualities and ability to take

the abuse inherent in correctional facility buildings. Today Tectum systems are being specified in similar facilities across the country because they are proven performers.

unsurpassed in their ability to withstand abuse, absorb sound and keep building costs in bounds. Contact Tectum Inc. for full details.

TECTUM INC.

105 S. Sixth St. . P.O. Box 920 Newark, OH 43055 (614) 345-9691 • FAX (614) 349-9305

Circle 101 on the reader inquiry card



# The Texas Society of Architects

would like to thank the following sponsors for their generous support of the 1994 Grassroots Leadership Conference in Lakeway, November 11-12, 1994.

Acme Brick
Bill Siedell 800/792-1234

Archillume Lighting Design Charles Thompson 512/346-1386

Austin Commercial, Inc. Mike Scott 214/443-5700

Boral Bricks - Henderson Division Buddy Gresham 800/443-8507

Jack Evans & Associates, Inc. Jack Evans 512/371-0800

Faulkner Construction Company
Jerry Hobbs 512/441-1111

Featherlite Building Products
Corky Moss 512/472-2424

Professional Lines Underwriting Specialists
Steve Sprowls 512/328-8395

# Surf the net: Snag a job

ARCHITECTURE IS ALIVE AND KICKING on the information superhighway, where America Online, the commercial computer network service, has a spirited forum called PLACES—for planning, landscape, architecture, construction, engineering, and specifications. PLACES is a freewheeling discussion board covering a variety of topics; the architecture section is by far the most active, with topics ranging from "Illegal Practitioners," "The Virtual Office," and "AIA—What Should It Be?" to "Yurts," "Architect? Ha! I'm A Builder," and "Classifieds."

Shortly after I signed onto AOL last May, an urban planner at the University of Florida mysteriously found me via the Internet (I suspect he did a search for all those who had "architect" listed in their personal profiles). He added me to his distribution list, and for a while I was inundated with urban-planning email, which included references to PLACES. I checked it out and was hooked.

Last summer, while cruising through PLACES, I saw a message from an architect seeking a programming consultant for a nursing school. Since health care and institutional programming and planning are among my areas of expertise, I faxed some information to what turned out to be a Louisiana number. I didn't hear anything further and forgot about it.

About two months later, I got a call from Glenn Angelle, of The Angelle Guidry Partnership, in Lafayette, La., the author of the posting. He had received the information I sent him and expressed interest in teaming with me for the project at Nicholls State University in Thibodeaux, La., which called for an outside planning consultant on the A/E team. Through phone, fax, e-mail and U.S. "snail mail," we exchanged more information and made the submission. Glenn was guardedly optimistic about our chances for success—"maybe 3 in 12," I recall him saying.

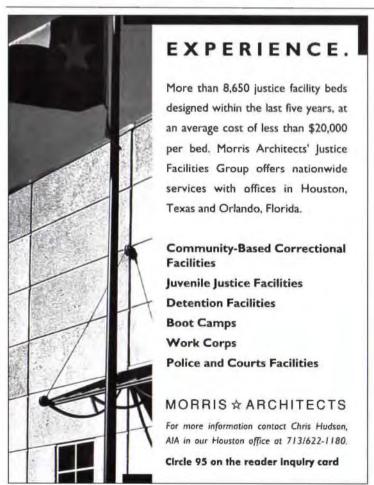
A few weeks later, the morning after the selection committee met, Glenn called me, ecstatic. Our team won the project with a proposal ranked first out of 22 submissions. The project is scheduled to start in mid-1995.

Given my success with AOL, I didn't hesitate to sign up for AIA Online when the Mac software was finally released last fall. Compared to AOL, AIA Online is not very user friendly. It took me several days just to figure out how to send e-mail. And the manual—written for a Windows application—was not much help.

During the months that I have used AIA Online, many of the AIA discussion groups have had few participants; even bulletin boards designated for AIA information are blank. In almost all regards—graphics, design, color, variety and quantity of information, and ease of use—America Online is superior. AOL also offers a gateway to the Internet, which AIA Online does not. There have been rumors, both from the AIA and on the AOL forum, that AIA Online may eventually be accessed through AOL. For those of us who have already found PLACES, it will be just another stop on the information autobahn.

\*\*Barbara Nadel\*\*

New York architect and writer Barbara Nadel may be e-mailed at BarNad@aol.com.





# SBCCI<sub>1994</sub> Standard Codes NEW COMMON CODE FORMAT

he 1994 editions of the Standard Codes™ published by the Southern Building Code Congress International are available. Prices for the new documents are listed below and include postage paid UPS ground shipping. SBCCI offers special options including single code purchases and multiple purchase discounts. Each code comes with a free set of tabs.

| Purchasing Option 1-Single Code | Members |  |
|---------------------------------|---------|--|
| 9 1                             |         |  |

**Nonmembers** 

Standard Plumbing Code, Standard Gas Code, Standard Mechanical Code,

Standard Fire Prevention Code ...... \$38 each...... \$57 each

# Purchasing Option 2-Standard Code Package

# Purchasing Option 3-Multiple Purchase Discounts

SBCCI offers discounts for purchasing multiple copies of single codes. We guarantee the best price possible for all members. If you're not sure which package is the most cost effective for your needs, call us and we'll work with you to give you the most for your money. If we don't, we'll give you an additional 10% off.

| Number of Copies | Discou |
|------------------|--------|
| 5-15             | 5%     |
| 16-30            | 10%    |
| 31-75            | 15%    |
| 76-more          | 20%    |

SBCCI publications and other products are guaranteed to give you 100% satisfaction. Return anything purchased from SBCCI at any time if it proves otherwise. We at SBCCI will replace it, refund your purchase price or credit your charge card, as you wish. We are here to serve you, our members and customers, and we do not want you to have anything from SBCCI that is not completely satisfactory.

Headquarters Office 900 Montclair Road Birmingham, Alabama 35213-1206 205-591-1853 FAX: 205-592-7001 Southwest Regional Office 3355 Bee Caves Road Suite 202 Austin, Texas 78746-6673 512-327-8278 FAX: 512-327-8286



Circle 29 on the reader inquiry card

# Alenco wrote the book



# to help with your planning

Alenco's 1994 product selection guide comes in a four-color booklet full of information you can use immediately in planning that new construction or the renovation project.

There are photographs and product details of various Alenco Commercial windows including single-hung, double-hung, horizontal sliders, projected, casement, and fixed. Examples of specific completed projects are shown.

This booklet also contains sections on Alenco Commercial's installation accessories and replacement window systems as well as a two-page spread sheet that answers 22 key design and engineering questions concerning each series of Alenco Commercial's windows.

Alenco Commercial is a division of Redman Building Products, Inc., one of the largest manufacturers of aluminum windows in America. Aluminum windows were an innovation of Alenco in the early 1950s, and architects and builders across the United States have been served by Alenco for more than 40 years.

Alenco Commercial provides many services to help you with your project from concept through completion, and you can find out more by requesting our 1994 product selection booklet.

Ask for your copy.



Alenco Commercial A division of Redman Building Products, Inc. 201 North FM 2818 Bryan, Texas 77803

1-800-444-1444

Circle 129 on the reader inquiry card

### **ACOUSTICS**

# JACK EVANS & ASSOC., INC.

ENGINEERED VIBRATION ACOUSTIC & NOISE SOLUTIONS

5806 Mesa Drive, Ste. 380 Austin, Texas 78731

FAX (512) 371-0825 (512) 371-0800



Circle 54 on the reader inquiry card

# ColorSeal won't take scuff from any criminal.



With a proven record as a tough and long-lasting coating of Texas jails and detention centers, Secure's **ColorSeal** floor coatings and **PermaShield** elastomeric coatings withstand the wear, tear, and abuse seen at correctional facilities.

### SECURE INCORPORATED

1000 Lofland Drive • Waxahachie, TX 75165 • 800-777-6157 • 214-937-8718 (fax) Secure (si•kyoor) adj. Not likely to fail or give way. Stable; safe.

Circle 34 on the reader inquiry card

Find Out Why Architects Specify Owens Corning's Elaminator® Over Other Metal Roof Insulation Systems.

# THE METAL ROOF INSULATION SOLUTION

For Owens Corning's High "R"

Elaminator® outside of Texas,
call 1-800-GET-PINK

(438-7465)

Energy Blanket insulated 10 major Texas prisons in 1993-94.

Energy Blanket of Texas, Inc. 1-800-877-3350 / 210-372-4000

Houston - 713-496-6370

Circle 213 on the reader inquiry card

# Don't be caught napping

Subscribe to *Texas Architect* today
See page 19 for details



# The Whys and Wherefores of the Texas Prison Building Program

by Marc. H. Brewster and Bob Sims

the penal code and restructured the state prison system, starting with an enormous building program that will double the state's prison capacity from 75,000 beds to 155,000 by the end of 1996; by the turn of the century, state prison officials say the system may grow to 205,000 beds.

PUBLIC CONCERN ABOUT CRIME, especially violent crime, combined with a serious overcrowding problem in the state-prison system, led the Texas State Legislature in 1991 to begin a restructuring of the state's criminal-justice system. Part of that restructuring involves an enormous prison-building program that will double the state's prison capacity from approximately 75,000 beds to 155,000 by the end of 1996; by the turn of the century, Texas Department of Criminal Justice officials estimate that the state will need 205,000 beds.

The first step in this process was establishment by the legislature, during a special session in 1991, of the Texas Punishment Standards Commission. The commission was asked to review sentencing and release laws, to develop ways to keep the most dangerous felons in prison, and to rewrite the Penal Code. Central to the commission's discussions, and to later legislative deliberations, was the impact of overcrowding on the prison system. A lawsuit—known as the Ruiz case—was initiated in the 1970s by a state prison inmate who said conditions in Texas prisons violated the U.S. Constitution's prohibition against cruel and unusual punishment; in the mid-'80s the court ordered the state to improve conditions and reduce overcrowding in Texas prisons or face stiff penalties. The state responded in a variety of ways, including releasing prisoners earlier and housing convicted felons in county jails until space became available for them.

Much of the public demand for action about crime was spurred by publicity about violent criminals who served only small portions of their sentences before they were released, often to commit other crimes. Because of the court orders to reduce overcrowding, prisoners could serve as little as 10 months of a 10-year sentence. Even with this early-release program, county jails were backed up with tens of thousands of the state's overflow prisoners.

By the early '90s, the decision to house the state's prisoners in county jails began to exact a high cost. During the 1991 special session, the legislature agreed to pay counties \$50 a day for each backlogged felon housed in county jails; in addition, the legislature agreed to begin—by Sept. 1, 1995—accepting those backlogged felons into the state system within 45 days of sentencing. In

| TEXAS PRISON-BUILDING PROGRAM: | 1993 | THROUGH | 1996* |
|--------------------------------|------|---------|-------|
|--------------------------------|------|---------|-------|

| Number of Projects | Millions of Dollars            | Number of Beds   |
|--------------------|--------------------------------|--|
| 10                 | \$386.0                        | 13,882   |
| 4                  | 153.0                          | 10,000   |
| 14                 | 180.0                          | 9,000  |
| 18                 | 458.3                          | 24,973   |
|                    |                                |  |
| 3                  | 58.0                           | 1,070  |
| 29                 | 168.7                          | 13,876   |
| 4                  | 54.0                           | 2,000  |
| 1                  | 3.5                            | 420  |
|                    | 10<br>4<br>14<br>18<br>3<br>29 | \$386.0<br>4 153.0<br>14 180.0<br>18 458.3<br>3 58.0<br>29 168.7<br>4 54.0 |

<sup>\*</sup> Based on information from the Texas Department of Criminal Justice

1992, the state was faced with more pressure when another lawsuit—the Alberti case—was filed by a state prisoner incarcerated in the Harris County Jail as part of the overflow plan; he brought the suit in response to poor conditions in the county jail. The court ordered the state to transfer convicted felons to state prisons more expeditiously. Working on an extremely fast track, the state in '93 and '94 constructed 10,000 beds in the so-called Alberti units (see TA, May/June 1993, pg. 22).

In 1993, faced with public concern about crime and court-ordered requirements to make changes, State Senator John Whitmire advocated an approach he described as both tougher and smarter. The state's 75,000 prison beds needed to be reserved for the most violent offenders, Whitmire said, and the state needed to work to rehabilitate nonviolent offenders rather than teaching them how to be better criminals by housing them with those violent offenders.

Prior to the 1993 legislative session, the Punishment Standards Commission made a number of recommendations, many of which were endorsed by Senator Whitmire and enacted during the session. The changes were wide-ranging and included creation of new categories of crimes; changes to punishment ranges; and changes to parole law. Starting in 1993, a defendant convicted of a noncapital aggravated offense and sentenced to prison must actually serve at least half his sentence or 30 years, whichever is less (instead of one-fourth or 15 years) and a person convicted of capital murder must actually serve 40 years (instead of 35). These changes to the parole laws mean that more criminals will be behind bars for longer than ever before, increasing the number of beds required.

Also enacted was a law establishing a new category of criminal justice facility, the state jail, to house those convicted of one of the newly defined crimes: the fourth-degree or nonviolent felony. A new division of the Texas Department of Criminal Justice, the State Jails Division, was created to operate the new facilities. The idea was to separate nonviolent inmates-convicted of such crimes as failure to pay child support, car theft, and writing "hot" checks-from the violent offenders in the rest of the state prisons and to stress communitybased treatment, education, and rehabilitation, including life-skills programs, substance-abuse treatment, and job training. Those convicted of fourthdegree felonies can be sent to state jails for up to two years but they must serve all of that time; they cannot obtain early release by earning credit for good behavior. The program, the state hopes, will break the cycle of recidivism for felons not yet turned violent, thus freeing up traditional prison beds for more violent criminals.

In order to pay for the state jail facilities and other prison beds required both by the various court orders and by the new laws, the legislature sent a \$1-billion bond issue to the voters in November 1993; the bonds were approved and the prison-building boom began.

Work began in 1994 on construction of the new state-jail facilities; by the end of 1995, according to TDCJ, approximately 25,000 state-jail beds will be built. The state-jails program is divided into two parts: Mode I and Mode II. The Mode I Program is based on a 1,000-bed prototype and will use a traditional design, bid, and build process managed and operated by TDCJ. The prototype Mode I design uses components from the Alberti units, specifically the design of the typical 50-bed dormitory.

The Mode II program, to be used at six sites, involves a different approach. Local Community Supervision and Correction Departments (CSCD) provided sites and incentives, solicited proposals, reviewed, and finally selected private development teams subject to approval by TDCJ. Those development teams are responsible for designing, building, and, eventually, operating the facilities.

In addition to the 10,000 Alberti or transfer beds and the 25,000 state-jail beds, the state is constructing about 14,000 regular prison beds—institutional beds—at 10 sites and 9,000 substanceabuse treatment beds at 14 facilities; another 17,000 beds of various types will also be constructed in the next two years.

Faced with this huge construction program, a limited budget, and a legislatively imposed schedule, the Texas Department of Criminal Justice has become a working "corrections laboratory" for new approaches to programming, design, delivery, and operation of state prisons and jails. TDCJ's understaffed Engineering and Construction Division was expanded to handle the task by teaming with private construction management firms to function as an extension of TDCJ's staff. Architecture and engineering firms assisted in the programming and design of prototype prisons and state jails to be adapted to sites in multiple locations. This prototype development included the use of pre-engineered building components to address issues of cost and, most important, scheduling. As the current construction program winds down, TDCI proposes to assemble team of staff, design firms, and construction management firms to implement a comprehensive review to capture the lessons learned during this effort to apply to future expansion programs.

Architect Marc H. **Brewster and Bob** Sims with Sverdrup Facilities, Inc., in Dallas, have worked on both the Mode I and Mode II state-prison programs. Sverdrup was the program manager for the Mode II program; in that role, the company assisted TDCJ in evaluating proposals by private groups to develop state jails. In addition, Sverdrup has been involved with the development of federal prisons both in Texas and elsewhere.

# We do Justice... Better!

Walter P. Moore and Associates, Inc.
Structural ■ Civil ■ Traffic Engineering

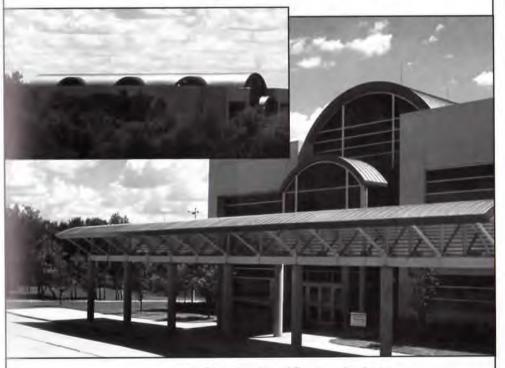
Over 40 Years Experience with Local, State and Federal Justice Projects

Contact: Lee Slade, PE (713) 630-7300

Tampa

Circle 127 on the reader inquiry card

# BERRIDGE.... THE WIDEST SOURCE OF ARCHITECTURAL METAL PANELS TO FIT ANY APPLICATION!



Project: American Airlines Learning Center

Architect: Vestal Loftis Kalista / Architects, Arlington, Texas

General Contractor: Manhattan Construction Co., Dallas, Texas

Berridge Licensee/Installer: Metal Systems, Inc., Irving, Texas

Berridge Representative: Southwest 7 Representatives, Dallas, Texas

Berridge Product: Curved Tee-Panel

Finish: Kynar 500° or Hylar 5000™ XL Duranar Pewter



# **Berridge Manufacturing Company**

1720 MAURY ST. / HOUSTON, TX 77026 / 1-800-231-8127

# MORGANTI

Meeting today's challenges with innovation

# Construction Management

How do we get the most value for the construction dollar?

### General Contracting

How do we accelerate the schedule without impacting quality?

# Design/Build

What is the appropriate design for our short/long term detention requirements?

## Privatize/ Finance

Who has the experience to successfully guide us through the construction maze?

Quietly building on success, Morganti has provided effective answers to these criminal justice client questions and delivered over 13,500 detention beds representing 27 projects.

Circle 142 on the reader inquiry card

# MORGANTI TEXAS, INC.

16825 Northchase Suite 708 Houston, Texas 77060 (713) 873-0150

# When Process Fails

IN MY EXPERIENCE, the disappointment and damage in construction projects is rarely the result of a design flaw or of the failed use of cutting-edge technology. Instead, such problems are most often the result of a breakdown in the process by which we design and build.

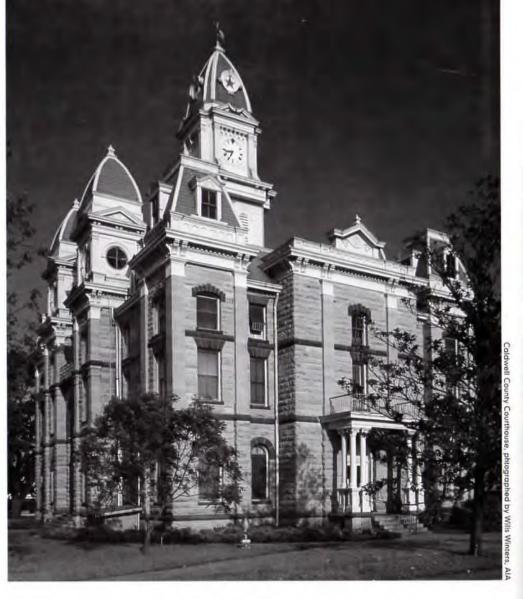
The business of construction is not simple. It involves a wide spectrum of stakeholders, including owners, users, financiers, and the public. It takes designers, manufacturers, managers, and artisans to deliver a one-of-a-kind assemblage without the luxury of evolutionary refinement through mass production and repetition. Some of the most successful practices of the last 20 years, including CRS, 3D/I, and Heery International have made a very successful business of managing that process.

We are also a culture enamored of tinkering with process. We seek policy solutions to all problems, be it welfare or health care, Bosnia or the Southwest Conference. That's why we hear so much about balanced-budget amendments, term limits, and salary caps—all schemes to accomplish by process what somebody else failed to do by performance. In architectural practice we have invented design—build, construction management, program management, and even creative hybrids like the "Bridging" method developed by Chuck Thomsen, FAIA, at 3D/I,

When do construction management programs break down? Whenever the parties, through avarice, fear, or contempt, find themselves in competition for success.

and George Heery. Each of these methodologies addresses shortcomings of the triad system defined in AIA documents A201, A101, and B14. There are good reasons to employ each of these systems, including parameters of cost, time, purpose, and the capability of the owner, but risk aversion is not one of those reasons. To be successful, each must be employed with the equitable assignment of all the required tasks and executed with meticulous management. To paraphrase Mies, the devil is in the details.

Where do these systems break down? Generally, it is when, through avarice, ignorance,



fear, or contempt, the parties find themselves in competition for success. A classic example from the traditional owner-architect-contractor triad is the not-unfamiliar scenario of an owner who fails to discipline his program of requirements to conform to budget reality, relying instead on hope and an architect who has oversold her role. The only way this project can be built is for a contractor to underbid, depending on incompetent subs and change orders to avoid having the bonding company finish the job. There will undoubtedly be technical failures, but they won't be due to pushing the envelope of building science. The root cause of the ensuing dispute will be a failure in the process of project delivery.

Under design—build, a common problem is for the contractor to undervalue risk and complexity associated with the design services he has agreed to deliver. If the building turns out to be unusable for its intended purpose (as happened in a case recently), the contractor may not be successful in hiding behind the architects with whom he contracted for limited drafting and plan-stamping services, and he will see his bonding company run for cover. The legal firefight that follows will again be due to a shortcircuit in the process, not some esoteric design issue worthy of a symposium.

Yet we all know of success stories under any process. It used to happen with a handshake between an experienced entrepreneur, a respected architect, and a craftsman builder. Now it happens when all of the various and requisite parties bring to the table realistic expectations, an honest appraisal of their own capabilities, and a healthy regard for the work of their peers. Then they must craft, manage, and execute a process that is both comprehensive and fair in its allocation of risk and reward. The design of that process is important, but just as in architecture, design relies upon execution.

John M. McGinty, FAIA

John M. McGinty of Houston, a former president of the American Institute of Architects, is managing principal of American Construction Investigations, a forensic consulting firm.

### Statement of Ownership, Management and Circulation

| TITLE                               | Texas Architect       |
|-------------------------------------|-----------------------|
| PUBLICATION NUMBER                  |                       |
| DATE OF FILING                      | 9/29/94               |
| FREQUENCY OF ISSUE Bimonthly, addi  | tional issue in April |
| ANNUAL SUBSCRIPTION PRICE           |                       |
| OFFICE OF PUBLISHER 114 West 7th, / | Austin, Texas, 78701  |
| PUBLISHER Texas                     | Society of Architects |
| EDITOR                              | Joel Barna            |
| MANAGING EDITOR                     |                       |
| OWNER Texas                         | Society of Architects |

|   | Average no. of copies each issue during preceding 12 months | Actual no. of<br>copies nearest to<br>filing date |
|---|---|---|
| TOTAL NUMBER OF COPIES PAID AND/OR REQUESTED CIRC.  | 9,033   | 9,302   |
| SALES THROUGH DEALERS AND<br>CARRIERS, STREET VENDORS AND<br>COUNTER SALES                            | 456   | 641   |
| MAIL SUBSCRIPTION   | 4,707   | 4,701   |
| TOTAL PAID/REQ. CIRCULATION   | 5,163   | 5,342   |
| FREE DISTRIBUTION BY MAIL,<br>CARRIER OR OTHER MEANS; SAMPLES,<br>COMPLIMENTARY, AND OTHER FREE COPIE | 2,912<br>S  | 3,427   |
| TOTAL DISTRIBUTION COPIES NOT DISTRIBUTED   | 8,075   | 8,769   |
| OFFICE USE, LEFT OVER,<br>UNACCOUNTED, SPOILED  | 809   | 533   |
| RETURN FROM NEWS AGENTS   | 149   | 0   |
| TOTAL   | 9,033   | 9,302   |



MID-WEST STEEL BUILDING COMPANY

"Quality steel buildings manufactured and trusted for the long term."

Corporate Offices 7301 Fairview Hauston, TX 77041 (713)466-7788 (800)777-9378 Fax 713-466-3194

Circle 112 on the reader inquiry card

# THANK YOU FOR YOUR SUPPORT.

IN 1994

Over the past 94 years Andersen has become the leader in the window and patio door industry by offering quality products that incorporate state-of-the-art technologies and superior craftsmanship backed by superior warranties.

As your distributor of Andersen Windows, we want to express our gratitude to all who have given us support by specifying Andersen products.

We would like to remind you of the services we have available to assist you in product selection.



... Technical Assistance in Detailing
... Code Review Information
... Job Site Survey Assistance
... Budget Studies
... Architectural Detail Files
... Residential Literature
... Commercial Literature
... CADD-I Autocad Software
... Product Samples
... Manufacturer's Plant Tours
... Breakfast, Luncheon and
Dinner Meetings

For any of the above & more, call us at Black Millwork.
1-800-486-7494 Austin
1-800-486-7495 Arlington

IN 1995

LOOKING FORWARD TO SERVING YOU.

# TRAVELING TEXAS



The KEYSIONE Retaining Wall System gives you more than just a distinctive natural stone look. Its geogrid technology not only adapts to changing site requirements—straight, curved, or terraced walls go up easily—but also provides the massive support that interstate highway builders need.

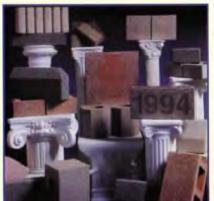
KEYSIONE's high-strength concrete modules and fiberglass pin system provide a positive interlock with reinforced soil mass, enabling wall heights to exceed 65 feet. Non-polluting, permanent, and maintenance free, KEYSIONE is easy on the eye and strong enough to hold the road.

Project: Interstate Highway 45 Overpass, Huntsville, Texas Client: Texas Department of Transportation (TxDOT) General Contractor: Forde Construction Co., Houston Keystone Installer: Booth Brothers Construction, Prairie Lea, Texas





P.O. Box 7115 · Waco, TX 76714 · 1-800-792-3216



# **DECRO-FACE**

**TEXTURED ARCHITECTURAL PRODUCTS** 

The new face in masonry is Decro-Face. More than a new product, Decro-Face is a process that can be applied to any surface of any shape to expose the aggregate and concrete matrix beneath a unit's surface skin. This visual interaction creates rich, colorful textures that open a new world of design flexibility. See it today. We're changing the face of masonry again with Decro-Face, exclusively in Texas from Jewell.





P.O. Box 7115 · Waco, TX 76714 · 1-800-792-3216

# Special Advertising Section

# Masonry Concrete

Interested in the companies featured here? Just note the "circle number" for any product or service that interests you and circle the number on the reader inquiry card on page 19. Add your name and address, mail the card—postage-free—to us, and we will forward your request immediately.

# We thought we'd take a moment to poke a few holes in the competition.



Synthetic stucco makes a good first impression. Unfortunately it's every impression after that you have to worry about. You see, artificial stucco (EIFS) doesn't stack up too well to golf balls, baseballs and the morning paper. It's not like brick.

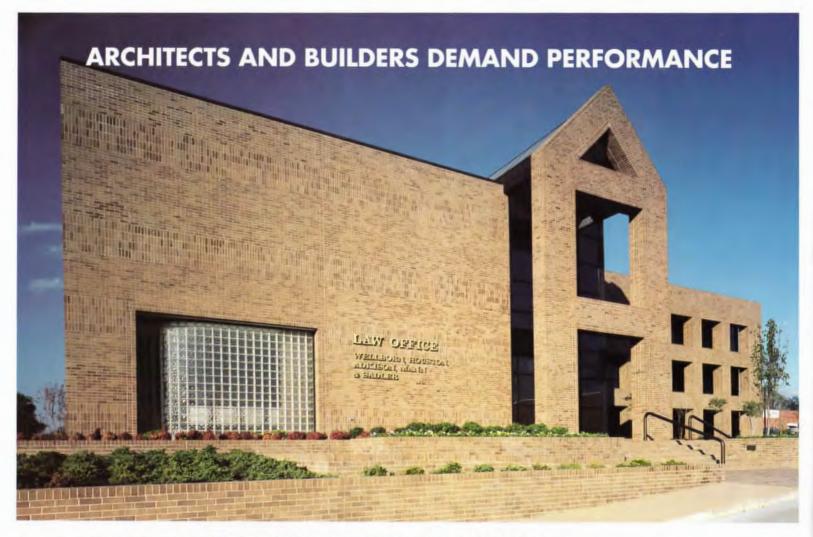
Brick is tough. Brick is oblivious to the elements and impervious to objects that commonly fly around the neighborhood- not to mention pencils, forks and scissors. Brick looks good too. It's maintenance-free, doesn't dent and it lasts. And when you consider that brick cost about the same as "fake stucco," brick is definitely better.

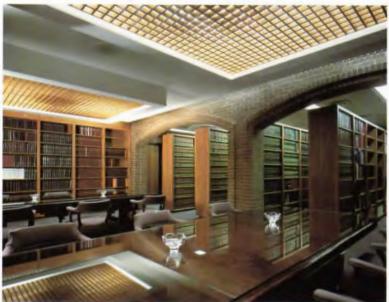
Please call the number below for more information about why brick is all it's stacked up to be.

1 - 8 0 0 - 7 3 3 - 1 8 1 3 Sponsored by the South Western Brick Counci

Circle 49 on the reader inquiry card







# **BORAL BRICK BENEFITS**

- · Extensive Sales and Support Network
- · Quality Raw Materials
- · Diverse Manufacturing Capabilities
- · Broad Range of Colors
- · 45 Years of Experience

# THE DESIGN PROFESSIONAL'S CHOICE

Boral's Henderson Division products are designed and manufactured to meet or exceed industry standards for both exterior and interior applications. Where tight dimensional tolerances and aesthetic versatility are demanded, our products meet the need.

Our goal is to produce brick which achieve maximum strength and durability, while supplying the designer a wide array of permanent color. Using the finest clay and shale materials, Boral bricks are manufactured through advanced techniques, yielding high quality products compatible with any architectural style and environment.

For over 45 years, architects have relied on Henderson's quality products and excellent sales support through our experienced sales force and extensive distributor network.

Whether structural or veneer, laid in place or panelized, may we suggest consideration of Boral Brick products on your next project.



# **BORAL BRICKS**



# **Henderson Division**

Post Office Box 2110 Henderson, Texas 75653-2110 903/657-3505 FAX 903/657-1195 1-800-443-8507



Why get locked up with ordinary masonry units when Featherlite unlocks your design imagination?

Heyan Women's Federal Prison Camp Architect: Page Southerland Page, Austin Contractor: BSW, Temple, TX

hasonry Contractors: Boenigk Masons, he., Bryan, TX; E.A. Pfeffer Masonry Co., Brenham, TX



"Featherlite's Burnished and split-face block products offered us a relatively inexpensive way to accomplish several goals: We wanted to recall an existing historical structure on campus through color and structural details; we wanted to emulate a true limestone appearance; and we wanted quick, dependable construction in a variety of wall conditions and building types across a large campus. Featherlite's range and reliability made all that possible."

- Don Oelfke, Design Director, Page Southerland Page

Just because prisons lock people up doesn't mean they must also lock out creative design expression. With accenting base courses of Featherlite Burnished Masonry Units and walls of Split-Face Masonry Units, this prison compound was transformed into a pleasant, yet protected, campus. In fact, Featherlite's eight standard colors and variety of custom options are nothing short of design parole. Use our palette of shapes and colors to transform ordinary buildings into extraordinary statements. Break out with Featherlite on your next project, and discover the key to unlock the beauty hidden in security and durability. Find freedom in design. Circle 6 on the reader inquiry card

Products Corp.

Marketing Dept. P.O. B
512/472-2424 Austin

P.O. Box 1029 Austin, TX 78767

Featherlite Building

# THE MORTAR NET™

- ABSOLUTELY ELIMINATES WEEP HOLE **BLOCKAGE DUE TO MORTAR DROPPINGS •** 
  - ASSURES A SUCCESSFUL FLASHING/ WEEP HOLE SYSTEM\* .





- · Weep Holes Stay Open- Mortar Net collects mortar droppings inside masonry cavity walls
- Fast, Easy Installation- requires no fasteners or adhesives, no special skills or tools

Patent #5230189

SOLD EXCLUSIVELY IN TEXAS BY: Hohmann & Barnard, Inc. 1-800-822-5228

FOR TECHNICAL DATA AND A FREE SAMPLE KIT CALL 1-800-664-6638

WHEN PROPERLY INSTALLED

Circle 91 on the reader inquiry card

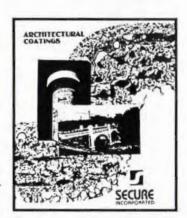
# High-Performance 5 High-Quality

# **Architectural Coatings**

for the Concrete & Masonry Industry

### LIBRARY UPDATE

Request our new high-tech comprehensive literature highlighting VOC-compliant and solvent carried elastomeric coatings. sealers, water repellents, block fillers, and surface treatments ... all essentials to your design. Also available, new newly re-designed information binders.



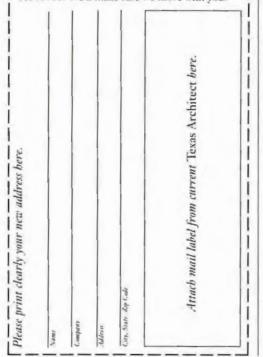


1000 Lofland Drive Waxahachie, TX 75165 800-777-6157

Circle 34 on the reader inquiry card

# Don't Forget Us!

Just because you are moving up, moving out, or simply moving on doesn't mean you have to miss Texas Architect. Fill out and return this notice six weeks in advance to 114 W 7th St, #1400, Austin, TX 78701. We'll make sure we move with you!



# The Beauty Of Stone, The Value Of Concrete.



Only Bomanite gives you the beauty of natural paving with the durability and affordability of concrete. Bomanite colored. imprinted and textured architectural concrete paving is available in a virtually limitless palette of colors, textures and patterns. Your authorized Texas Bomanite contractors are:

Bomanite of Houston, Inc. Ralph Maxwell P.O. Box 925 Houston, TX 77001 (713) 523-6210

**Bomanite of Central Texas** Russell or Cheryal Waggoner 8700 Granada Hills Drive Austin, TX 78737 (512) 288-3773

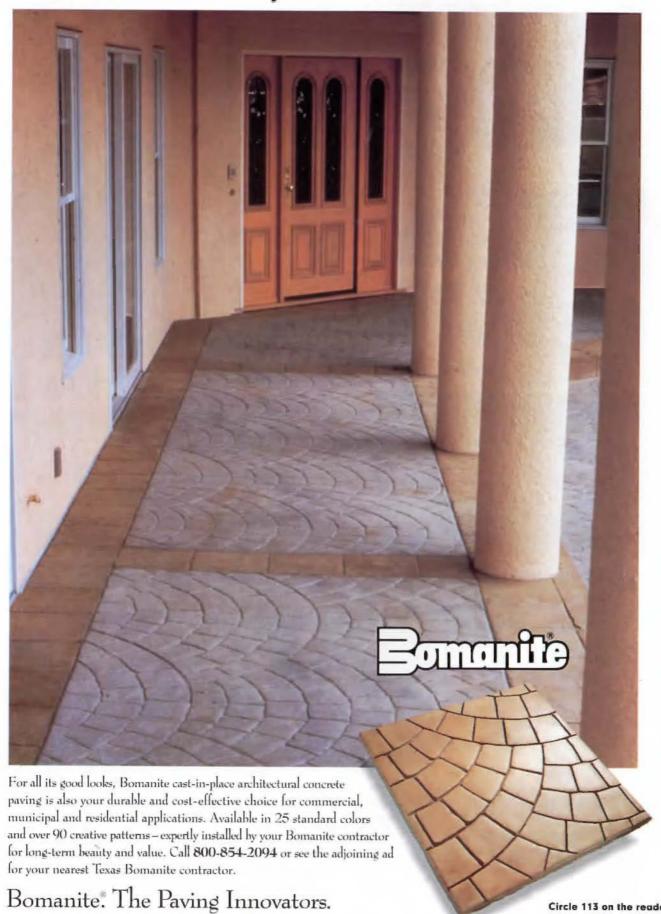
North Texas Bomanite, Inc. Scott Balch 2636 Walnut Hill Lane Suite 313 Dallas, TX 75229 (214) 350-8040

Bomanite of El Paso Andy Echaniz 1075 Esplanada El Paso, TX 79932 (915) 584-4888

**Bomanite of West Texas** Tom Parrish 605 N.W. 14th Street Andrews, TX 79714 (915) 523-4357

**Bomanite of The Valley** Bill McElroy 1001 S. Ed Carey Drive Harlingen, TX 78552 (210) 428-1000

# Beauty Inspired By Nature. Value Created By Bomanite.



Circle 113 on the reader inquiry card

# Serving Texas Architects Since 1945



- Caesar Stone Tile and Panels
- Weck Glass Block
- Hand-Made Brick
- · Architectural Terra-Cotta
- Nuway Entrance Matting Systems

# **Great Southern Supply Company**

1-800-323-4398 Houston 713-644-1751 Dallas 214-358-1070

Circle 212 on the reader inquiry card



# Go ahead. We love a challenge.



When your challenge is complexity and quality, or time and budget, we're manufacturers of:

- ★ Concrete Masonry Units
- ★ Custom Masonry Units
- ★ Retaining Wall Systems
- ★ Quikwall® Surface Bonding Cement
- ★ Quikwall® Fiber Reinforced Stucco
- ★ Quikwall® Finish Coat Stucco

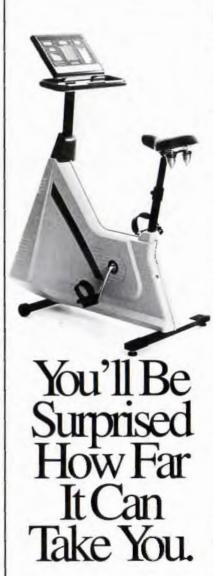
We've met with some challenging projects through the years. We provided the characterful masonry units that gave local color and historical connections to complex projects like the San Antonio International Airport and the new Alamodome. Special shapes and colors to the technical support to ensure that installations will last. What's more, we can meet tight budgets and schedules for everyday buildings with Quikwall®concrete and cement products. So bring us your challenges-we'll bring you success.

# ALAMO CONCRETE PRODUCTS, Ltd.



6981 East Evans Road San Antonio, TX 78266 (800) 827-6550 (210) 651-6550 Fax (210) 651-9632

Circle 78 on the reader inquiry card



This bike may not be going anywhere, but the rider is. Exercise can help your heart go the distance. For more information call 1-800-AHA-USA1.



This space provided as a public service.

D1994, American Heart Association

### **BORAL BRICKS**



### **Henderson Division**

Post Office Box 2110 Henderson, Texas 75653-2110 903/657-3505 FAX 903/657-1195 1-800-443-8507



### The Design Professional's Choice

Boral's Henderson Division products are designed and manufactured to meet or exceed industry standards for both exterior and interior applications. Where tight dimensional tolerances and aesthetic versatility are demanded, our products meet the need.

Our goal is to produce brick that achieves maximum strength and durability, while providing the designer a wide array of permanent color. Incorporating the finest clay and shale materials. Boral bricks are manufactured using advanced technologies, yielding high-quality products compatible with any architectural style or environment.

For over 45 years, architects have relied on Henderson's quality products and the excellent sales support provided through our experienced sales staff and extensive distributor network.

Whether structural or veneer, laid-inplace or panelized, please consider Boral Brick products on your next project.

Circle 46 on the reader inquiry card

# PCGLASSBLOCK®



We're your authorized distributor of American-made PC GlassBlock\*. We provide design and technical guidance, PC GlassBlock\* products and accessory samples, and project quotations. We can handle your project demands confidently, efficiently, and exactly as specified. Our years of experience mean we can help you build with confidence with one of today's most versatile construction materials.

> The Glass Block Shop Master Distributor 214/243-7343 800/777-2107 Fax 214/243-3666

Circle 104 on the reader inquiry card

## Columns You Can Read



Columns have long been recognized as the construction unit that most closely resembles the human body. So, why have columns that are predictable, bland, and uninspiring? Like people, columns come in an endless variety. Especially when you build your columns with Featherlite Burnished and Split-Face Masonry Units. Whether used in color and surface combinations from their own palettes, or together with other materials such as stone, brick, or stucco, Featherlite masonry units let you express the warmth, character, and personality in columns that you find in the many different people in your life and work. Read our columns. And you'll enjoy volumes of possibility.

Featherlite Building Products Corp.

512-472-242

ERLIT

Marketing Dept. P.O. Box 1029 Austin, TX 78767



#### Pavex

SignalStone from Pavex is the only paver product designed specifically to meet the requirements of Title III of the Americans with Disabilities Act. Because SignalStone is part of the Pavex integrated system of paver products, designers can comply with the specific requirements of the law without sacrificing design flexibility or aesthetic balance. And SignalStone can bring paved areas into compliance quicker and for less cost than other paving methods. SignalStone is manufactured with raised truncated domes that are an integral part of the paver, not a feature added after the manufacturing process.

Circle 93 on the reader inquiry card



O.K., we admit it. We know, and we know you know, not even a brick house is going to stand up to 200 mile an hour winds. We just wanted to make the point that masonry construction offers outstanding sturdiness and durability along with its other excellent attributes. Like warm and welcoming good looks. Like natural insulating advantages. Like design flexibility and versatility. So whether your greatest concern is outstanding beauty or still standing durability, make it masonry. And make it everlastingly beautiful. For all the facts about creating with masonry, call or write.



Masonry Institute of Texas P. O. Box 34583 Houston, Texas 77234 (713) 941-5668



### **FARMERS MARKET DISTRICT STREETS**

OWNER: CITY OF DALLAS, DEPARTMENT OF PUBLIC WORKS ENGINEER: R. L. GOODSON, JR. INC., CONSULTING ENGINEERS, DALLAS, TX

LANDSCAPE ARCHITECT: THE H.O.K. PLANNING GROUP OF HELLMUTH, OBATA AND KASSABAUM, INC., DALLAS, TX

GENERAL CONTRACTOR: ED BELL CONSTRUCTION, DALLAS, TX PRODUCT: 118,000 SQ. FT. HOLLAND STONE SYSTEM PAVERS BY PAVESTONE CO.



PAVESTONE HOLLAND STONE SYSTEM PAVERS PROVIDE A FESTIVAL OF COLOR. PATTERN AND TEXTURE AS A BACKDROP FOR NATURE'S HARVEST.





MODULAR CONCRETE BEAUTY

(800) 245-PAVE OR (800) 580-PAVE (TEXAS ONLY)

PAVESTONE® - TRADEMARK OF PAVESTONE CO. © PAVESTONE CO. 1994

DALLAS/FT. WORTH, TX: (817) 481-5802 HOUSTON, TX: (713) 391-7283 PHOENIX, AZ: (602) 257-4588 LAS VEGAS, NV: (702) 456-6292 DENVER, CO: (800) 289-2562 INDEPENDENCE, MO: (816) 796-6696

# We shocked our competition with air. Imagine what we can do with electricity.

The first name in pneumatic security locks is now the best name in electromechanical, too. You know Airteq as the innovator of Airlocks™, improving prison security with the trusted technology of pneumatics. Now, Airteq introduces its new lines of mechanical and electromechanical locks.

Same engineering

facturing expertise. More ways to prove it.

Circle 9 on the reader inquiry card

Airteq's electro-mechanical lock uses a twophase, bi-polar stepper motor. Sounds complicated.

But here's the shocker. It's the same dependable motor
many industries have relied on for years — everything
from aerospace to manufacturing automation. And only
Airteq engineers a lock that takes advantage of its
proven technology.

principles. Same manu-

Other electro-mechanical locks employ gears, switches, brushes and armatures that require lubrication and are subject to the adverse effects of dust and heat. Airteq's solution

eliminates these problems. With fewer moving parts,

the brushless linear actuator's sealed design is virtually maintenance-free. Longer-lasting. More reliable.

Plus, every Airteq lock is U.S.-manufactured and guaranteed.

Whether it's retrofit or new construction, call 1-800-466-3007 for the ideal security

locks and associated hardware for your facility.

Pneumatic. Electromechanical. Mechanical. Count on Airteq for everything.



Airreq Systems W.S.A., Inc. 6285 SW Lakeview Blvd. Lake Oswego, OR 97035



# Prison Prospects: More to come

by Barbara Nadel, AIA

IN 1994, THE UNITED STATES housed over one million individuals in its state and federal prisons, giving the U.S. a rate of incarceration second only to that of Russia. That's not counting the 500,000 prisoners awaiting trial or serving short sentences in city or county jails across the country. Texas plays a large role in these totals. As of the end of this year, after undertaking the largest one-year prison-building program in world history, Texas is projected to have a prison population of 101,000-roughly equal to the population of Waco. This is second only to California's 126,000 inmates, and, again, the figures do not include those in city and county jails. By comparison, the Federal Bureau of Prisons houses 93,000 inmates, and New York State houses 66,000.

These milestones are destined to fade to relative insignificance, however: Despite overall crime rates that have been falling throughout the 1990s, the epidemic of violent crime continues across the country, and the electorate has voted again and again for tougher action. According to the National Institute of Corrections, an average

of 40 to 60 new state prisons go on line every year. Forty-eight prisons opened nationwide in 1993, with 43,000 beds in new construction and 10,000 beds in additions or renovations. During 1994, the pace increased: Between 100,000 to 115,000 state prison beds were planned, including 74 new facilities and 78 renovations, representing \$6 billion in state prison construction around the country. As with the numbers above, these figures exclude city and county jails, nor do they include federal prison spending.

> With the opening of the new 480-bed supermaximum-security prison in Florence, Colo., in late 1994, the Federal Bureau of Prisons is trying to shed its "Club Fed" image by making its already no-frills buildings even more austere. Currently, there are several regional federal medical centers and detention facilities projects underway across the country, including one near Beaumont. Overall, the 75 federal facilities are at 137 percent capacity, with nine percent of the federal prison population in contract, or privatized, facilities. Less than three percent of inmates are violent offenders; the highest proportions of inmates serve 5 to 10 years for drug offenses in minimum-security facilities. Federal officials are also working on reusing closed military bases as



Fence detail at a recently completed Texas **Department of Criminal Justice Substance Abuse** Treatment Facility near Brownwood, by DMJM/ Jones & Kell

Good news for corrections architects: Prison construction nationwide continues to grow. Bad news for taxpayers: Every dollar spent on construction is a commitment to up to \$20 in operating costs.

La construcción de

Unidos continuará

prisiones en Estados

aumentando, por razones que incluyen la necesidad

de desapiñar las facilidades

existentes, separar a los

estructuras antiguas y

tratamiento especial.

las insuficientes

prisioneros mas peligrosos

de los comunes, reemplazar

crear nuevas facilidades de

Aunque este aumento en

construcción es gran fuente de empleo para arquitectos

especializados en prisiones,

para contribuyentes: Cada

tambien es un alto costo

construcción de prisiones

constituye \$20 en costos de

dólar invertido en

operación.

federal detention facilities: Fort Dix, N.J., was recently converted to a low-security prison camp, with barracks converted to dormitories. At Fort Devens, Mass., an \$85-million conversion project includes the renovation of a 30-year old Army hospital to a prison hospital, a new prison psychiatric hospital, housing, and administrative buildings. Officials are currently involved in selecting a team for a similar conversion of portions of Dyess Air Force Base in Amarillo.

Incarceration continues to accelerate, and prison construction looks like one of the most dependable growth industries nationally for the rest of the decade. Federal prison populations are growing by 1,000 per month, and federal funding to handle the new prisoners was provided by Congress in the 1994 crime bill (which also defined a long list of new federal crimes). Another 5,000 people enter state prisons and jails each month, and states, counties, and municipalities are building at historic levels just to keep up. The states with the largest prison populations are planning the biggest increases: By the year 2000, California anticipates that it will have 232,000 prison beds, while Texas expects to double to 206,000 beds. Some experts say the national incarcerated population could reach two million by the turn of the century.

### Why growth will continue

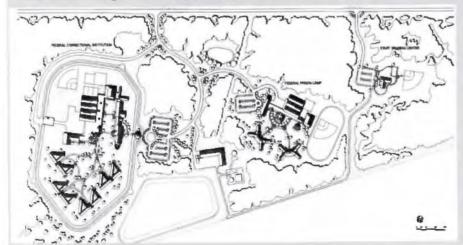
A NUMBER OF FACTORS lie behind the recent growth in prison building, including federal lawsuits contesting prison overcrowding in a number of states. For example, the recent Texas emergency-bed prison-building program, which added 10,688 prison beds in 24 state prison sites across the state in less than seven months in 1994 (please see "Hyperfast Track," p. 49), was undertaken to avoid penalties threatened by a federal judge following a prison-overcrowding suit that started in the 1970s.

Changes in sentencing guidelines enacted in the 1994 federal crime bill should also increase prison populations: The \$7.9 billion in aid for state-prison construction promised in the bill will be available only to those states that require "truth in sentencing," meaning that inmates serve at least 80 percent of their sentences. By comparison, experts say, the average prisoner in Texas served less than half his sentence in 1992. With prisoners behind bars longer, officials can't count on turnover to accommodate new inmates. Many large states will not qualify for this federal funding however, because judges and prison officials want to maintain sentencing structures that incorporate work release and parole, the safety valves that relieve overcrowding.

Other factors will continue to stimulate new prison building: the need to replace aging and inadequate facilities; development of new facilities for separating the rising number of violent offenders from those convicted of non-violent crimes; the need for special facilities for medical care and for juveniles, women, and those with special needs.

### **Three Rivers**

HOK in Dallas designed the Three Rivers Correctional Institution in South Texas as a "direct supervision" facility, in which unarmed guards are stationed in housing units of up to 64 cells. The approach, at first controversial, has been shown to result in decreased violence and vandalism; direct supervision facilities rely on "normalized" design, which emphasizes a non-institutional loak.





Construction programs call for a variety of new building types, including barracks-style boot camps, open dormitories, prison health facilities, mental-health units, juvenile-detention centers, and a greater proportion of "hard" cells for violent offenders.

In state correctional systems across the nation, the percentage of women prisoners is rising rapidly. exceeding six percent of the total inmate population. According to a study published by the Bureau of Justice Statistics, "Women in Prison: A Survey of State Prison Inmates, 1991," the 39,000 women housed in state prisons were likely to be minoritygroup members, age 25 to 34, unemployed at time of arrest, and high school graduates. Overall, women had shorter maximum sentences than men because they were more often convicted of drug and property offenses than violent crimes. Over half the women were substance abusers; six percent of the women entered prison pregnant. As recent studies indicate, more women enter the correctional system with medical problems, with an estimated 60 percent requiring secondary-care followup services, especially for high-risk conditions. The result, the report contends, is that more women's medical facilities and services will be needed to fully meet the special needs of pregnant women in prison and those with infants and young children. California is developing a new prototype, "Pregnant and Parenting Women's Alternative Sentencing Program," a nonsecure facility that will include Below: The Federal Correctional Complex at Beaumont, currently under construction, was designed by HKS of Dallas. The 1.5-million-square-foot complex, with 4,160 beds, will consist of four components: a minimum-security prison camp and low-, medium-, and high-security correctional institutions.





Above: HOK used a regionalist vocabulary for the Three Rivers Federal Correctional Institution; the program called for possible future use as a

college or some other institutional type.

Left: cell interior

Right: dining room interior; the emphasis in the

design was on "direct supervision" and a "normalized" atmosphere, which increases staff safety and decreases costs for vandalism.





substance abuse treatment and prenatal correctional facilities.

Regionalization—combining prisons in regional centers to achieve economies of scale for transportation, purchasing, medical care, and administrative functions-is another factor that will contribute to continued prison building. Officials also find regionalization attractive because it can help with staff recruitment and retention at prison facilities. At the same time, few urban and suburban neighborhoods welcome new corrections facilities into their backyards; many rural communities, by comparison, look on prisons as a cottage industry, offering economic development packages and land use incentives to attract such projects in exchange for jobs and enhanced local revenues. As states become more urbanized, the relative attractiveness of rural locations to prison officials could grow, fostering continued regionalization of facilities.

A final factor leading to new prison construction is privatization, arrangements under which private companies own, operate, and staff correctional facilities. Proponents say private construction-financing mechanisms, such as multi-year leasing, can free up scarce government resources for schools, hospitals, infrastructure, and other uses. Additionally, they say, privatization encourages efficient negotiation of maintenance contracts, with more flexibility for the companies that operate the facilities. In Texas, one of only 13 states permitting privatized prison facilities, contractors must demonstrate that they will operate facilities at least 10 percent below the costs of comparable state facilities. Food service, medical care, education, vocational training, and other operational functions are now routinely contracted out to private vendors. For example, Texas contracts its overall correctional medical services to the University of Texas Medical Branch at Galveston. As savings are documented, other states may come to accept privatization as a means for further prison development.

### Long-term Impacts

VOTERS NATIONWIDE may now think of building prisons as the solution to crime. But the same voters may learn to think of prisons as the sources of

# **Hyperfast Track**

FACED with an impending court-imposed deadline in late 1993 and a backlog of 30,000 prisoners, the Texas Department of Criminal Justice embarked on phase one of its Emergency Bed Program, adding 10,688 beds in 32 buildings around the state (photos left and below show a typical exterior and interior). CRSS (now HOK) and 3D/International served as "integrating construction managers," working with Brown & Root, Fluor Daniel, Gilbane Building, and Turner Construction as construction managers and with Butler Construction as building manufacturer and erector. The \$140-million program was completed, from start to finish, in 172 days, at a cost 15 percent below that of previous TDCJ projects.



new problems, once the new facilities planned for the rest of the decade come on line. It is difficult to predict the legal, social, medical, environmental, technical, economic, and public-policy implications of incarcerating so many people with public funding. But one thing is clear: It will be costly.

The increase in the number of inmates in the country's prison systems is staggering, but no more so than the costs of maintaining the system are today. Over the next two years Texas will spend \$4 billion, or 5.7 percent of the state's \$70-billion budget, on criminal justice operations. California will spend \$3.1 billion, or 7 percent of its budget, while New York will spend \$1.5 billion, or 4.5 percent of its total state budget.

Operating prisons is expensive. In 1994, it cost Texans \$19,345 per year to feed, clothe, house, and supervise an inmate, twice the cost of a year at the University of Texas. In California, the annual cost per inmate is \$24,000; in Wisconsin, \$25,500; for the Federal Bureau of Prisons, the average was \$20,900, with a high of \$26,700 at the hospitals; in New York State, \$32,000. The highest tab is at

New York City's Rikers Island, an 18,000-bed community of 10 city jails on an island near La Guardia Airport. There, the 1994 annual cost per inmate was an astronomical \$58,536, averaging \$160 per day, the price of a decent midtown hotel room.

Texas has a lower annual cost per inmate than other states because, currently, the majority of existing beds are in inexpensive, dormitory-style prefabricated metal-panel buildings for low-to medium-security inmates. These modular structures do not contain the heavy construction finishes, expensive hardware, high-tech security devices, or staffing ratios that will be found in the next generation of maximum-security prisons for violent offenders to be built throughout the state. When those beds go on line, annual costs can be expected to rise significantly.

Factor in the effects of doubling the number of prisoners in the system, and the numbers start to look pretty bleak for lawmakers trying to fund schools, hospitals, and roads. Experts estimate that every dollar spent for prison construction equals a commitment to another \$20 in operating costs. In Texas, at the turn of the millennium, maintaining the projected prison population of 200,000 will cost something like \$4 billion in 1994 dollars each year. Federal monies will be no help, unless policy changes in Washington: This year's crime bill included no funding for operating costs.

Texas prisons and jails are now in a rapid growth phase, with equally rapid growth to follow. Prison officials and designers have embraced a wide variety of programs and delivery modes for the new facilities. But surely it is prudent to wonder if the rush to build, with so little time to evaluate experiments, will serve Texas well in the future. The many lightweight, speedily constructed buildings will certainly strain the capacity of administrators to maintain their facilities. And the question of the optimal number of inmates to be confined within a single institution is not the same as that of the cheapest configuration for construction.

The challenges ahead in the corrections arena are considerable, especially for architects, administrators, and public officials concerned with fiscal responsibility, public safety, and the causes and effects of crime. The collective response to these challenges today will play an important role in shaping the country's priorities well into the next century.

Barbara A. Nadel, AIA, is principal of Barbara Nadel Architect, a New York City firm specializing in programming, planning, and design of bealth, correctional, and institutional facilities.



Above: Arrangements for handling maximum-security prisoners drove the design of an addition at the McAlester State Prison in McAlester Okla.; a single entrance serves the earth-bermed building.

Right: Construction is steel and poured-inplace concrete.

Right and right, bottom: site plan and section

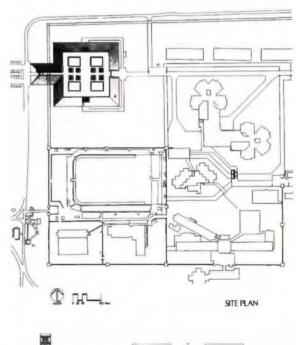


A la penitenciaria estatal de McAlester, en Oklahoma, se le añadió un segmento de máxima seguridad de 200 celdas. El diseño arquitectónico permite visibilidad total y limita el movimiento de prisioneros. A diferencia de cárceles convencionales, comida y otros servicios son provistos a cada celda, con el propósito de reducir la supervisión de tráfico. La única fuente de luz natural es una alta claraboya lateral.

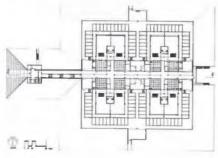
# To the Max

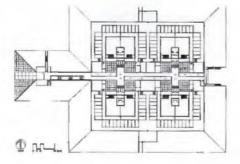
by Emily Alexander

THIS 200-CELL ADDITION to the Oklahoma State Penitentiary in McAlester, Okla., built to house maximum-security and death-row inmates, sits within an earth berm, isolated from the rest of the penitentiary. The two-story concrete-and-steel building consists of eight 25-cell pods, housing a total of 400 prisoners. The clients required the design to limit inmate movement and provide constant visibility of all areas. These concerns dictated many of the maximum-security addition's interior features. Natural light enters only through high clerestory windows. Each pod contains all inmate services, reducing transport supervision. Unlike most prisons, there is no cafeteria or library: Food and books are brought to the cells. Inmate spaces for recreation and counseling are also within each pod, but separate from the cell areas. Centrally located, the control areas have complete and continuous views, while a service corridor provides controlled access to each pod for maintenance. A separate elevated corridor brings visitors to the small, no-contact visiting area, directly accessible from the cells by the inner secure walkway.









Top: Clerestory windows bring natural light to the central courtyard and corridor of each cell area.

Above and above right: first-floor and mezzanine floor plans

Far right: control-room plans and section detail

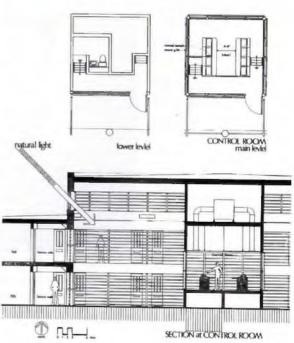
PROJECT Oklahoma State Penitentiary Maximum-Security Addition, McAlester, Okla.

CLIENT State of Oklahoma PROJECT TEAM Burton.

Knowles & Love and Henningson, Durbam & Richardson, Dallas (Bob Price, design; Don Olson, project manager; Clifford Isom, security; Alan Watt, mechanical engineering; Charles Hyman, electrical engineering)

CONTRACTOR Wynn Construction, Oklahoma City

PHOTOGRAPHER James F. Wilson



# **Adapting to Site**

by Joel Warren Barna

IPI ARCHITECTS OF DALLAS adapted a prototype developed earlier for the Texas Department of Criminal Justice in the firm's design of the D.W. "80 John" Wallace Unit. Completed in early 1994 for \$18.13-million (some \$150,000 under the original contract amount), the 1,000-bed project is a medium-security prison built on 27 acres of a 300acre site near Colorado City in Mitchell County (another facility, a "state jail" to house non-violent offenders, is being built on an adjacent parcel, and the master plan calls for up to two more units).

The project's 17 structures, including four 250bed housing units, are completely self-sufficient, with a full-service laundry, a 12,000-square-foot kitchen serving 4,000 meals per day, and medical facilities. Structures were built with cast-in-place and precast concrete, concrete masonry units, and pre-engineered-metal-building systems. H.B. Zachry Company built 500 precast modular cells that were delivered to the site and assembled for the housing units, providing a considerable savings over alternate construction methods.

In documenting the firm's adaptation of the existing prototype, JPJ reduced construction costs by redesigning the foundations and the structural-column configuration. These and other changes resulted in considerable cost savings, and JPJ's documentation of the construction costs, along with the development of prototype specifications, resulted in creation of a new standard for the TDCJ 1,000bed prototype.





Above: gerial view of Wallace Unit, which occupies 27 acres of a 300-acre site masterplanned for a new state jail (under construction but not shown) and two more corrections units.

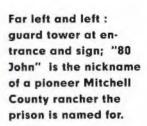
Right and bottom far right: Housing buildings were constructed with factory-cast concrete cell units transported to the site.

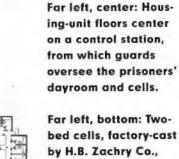


7P7 Arquitectos de Dallas adaptó un diseño prototipo al crear la Unidad Wallace en el Condado de Mitchell. La autosuficiente unidad, que contiene 17 estructuras con lavandería, cocina, y servicios médicos, fueron construídas por \$150,000 menos de lo presupuestado, en parte por el uso de unidades prefabricadas. JPJ ha establecido, para el Departamento de Justicia Criminal de Tejas, un nuevo prototipo de carcel de mil camas.







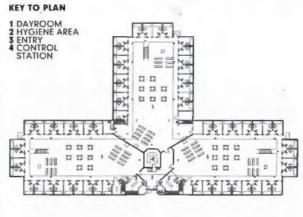


Far left, bottom: Twobed cells, factory-cast by H.B. Zachry Co., line the perimeter.

Left: housing unit plan

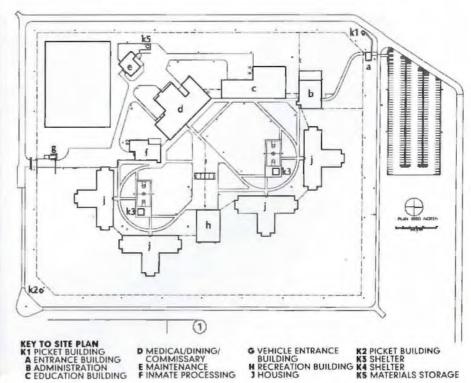
Below: site plan





REST FLOOR PLAN (L. D. IL & H





Far right: cells arranged around the central dayroom

Below: Night view; the perimeter is ringed by barbed wire fencing.

PROJECT Daniel Webster "80 John" Wallace Unit 1,000-bed medium-security prison, Mitchell County

Mitchell County

CLIENT Texas Department of
Criminal Justice (J.B. Cole,
Deputy Director for Engineering; Mike Collins, design manager; Royal Putnam, design
coordinator; David McCafferty, area manager; Frank erty, area manager; Frank Toland, project manager; Rod-ney Cooper; Warden)

ARCHITECT JPJ Architects, Dallas

CONTRACTOR Bill Harbert Construction Co.

CONSULTANTS Halff Associates (civil engineering); Datum Engineering (structural engi-neering); Reed Wells Benson and Company (mechanical, electrical, and plumbing engineering); Latta Technical Services (security); H.G. Rice and Company (food services and laundry); Henley-Johnston & Associates (geotechnical) PHOTOGRAPHER Michael Lyon,

Dallas





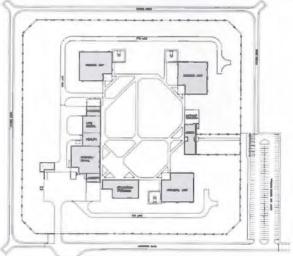






Above: Large
multipurpose rooms
for education and
therapy show the
emphasis on
rehabilitation at the
facility.

Right: site plan



# The Treatment

by Mark Denton

FOR THE Texas Department of Criminal Justice's Substance Abuse Treatment Facility in Brownwood, the joint-venture firm DMJM/Jones & Kell (now Kell Muñoz Wigodsky), adapted Jones & Kell's earlier 500-bed Substance Abuse Treatment Facility (SATF)-prototype compound design to fit a portion of the World War II-era Camp Bowie Military Reservation.

Situated around a central courtyard on a 24acre site, the individual buildings total approximately 113,000 square feet, including an administration building with attached outdoor visitation area, an education building, kitchen and laundry facilities, housing units, and a health center able to handle minor medical and dental needs.

The facility's three housing units are each further divided into three distinct pods, with their own day rooms and 56-bed sleeping areas. The three pods are supervised by a central control station and share counseling and meeting rooms. The housing units have their own outdoor recreation areas, as well as covered porches that shelter inmates and staff alike from the Texas sun.

The SATF's emphasis on education and substance-abuse rehabilitation can be seen throughout the facility. Each of the housing units includes offices for substance-abuse counselors, and the day rooms are frequently used for grouptherapy sessions. The education building contains six classrooms, an academic library, and a computer lab.

PROJECT Substance Abuse Treatment Facility, Site Adaptation, Brownwood CLIENT Texas Department of Criminal Justice

PROJECT TEAM DMJM/Jones

& Kell (now Kell Muñoz Wigodsky, San Antonio): Principals-in-charge: Gil Butler,
DMJM; Dan Wigodsky, Kell
Muñoz Wigodsky; Project
managers: Larry Hartman,
DMJM; Benito Polendo, Kell
Muñoz Wigodsky; Construc-

tion administration: Bill Mundy, Kell Muñoz Wigodsky CONTRACTOR BFW Construction. Temble

CONSULTANTS John Spisz, DMJM (structural engineering); Micbael Shapiro, DMJM (civil engineering); Bill Gifford and Maurice Cox, DMJM (mechanical, electrical, and plumbing engineering)

PHOTOGRAPHER Michael Lyon, Dallas



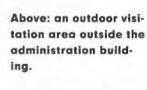
La oficina de Jones & Kell, en conjunto con la oficina DM7M, diseñaron la Facilidad de Tratamiento de Abuso de Sustancias Controladas en Brownwood. Los edificios, que incluyen unidades residenciales, centro administrativo, cocina, lavandería, y facilidades educacionales y médicas, estan situados alrededor de un patio interior. El diseño general enfatiza la educación y rehabilitación.







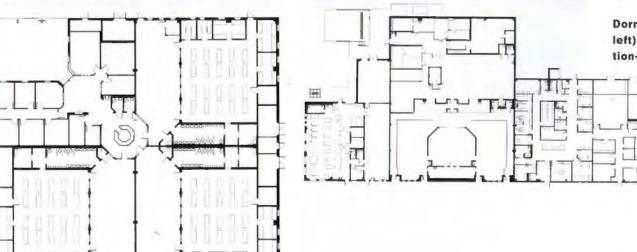




Top left: Covered porches provide assembly areas.

Far left: Each dormitory holds 56 beds

Left: a high-security cell for those who can't handle the program





# **Baker Street**

by Emily Alexander

THE 1,120-BED BAKER STREET FACILITY IN HOUSTON. designed by Morris Architects, is the newest and largest residential treatment facility operated by a local community supervision department in the U.S. The two-story, 110,000-square-foot, precastconcrete structure, built with long-span double tees and insulated wall panels, consists of a central service area and two housing wings, each offering different treatment programs. In a unique programmatic response intended to make the facility less prison-like, the architects separated the sleeping and dayroom areas, enabling the ground floor to incorporate a greater number of functions such as dining, lounge, and classroom spaces, while permitting officials to offer services for longer periods of time.

The residents in the program, sentenced for non-violent crimes, stay up to 90 days and undergo a rehabilitation program that includes life-skills education, substance-abuse counseling, and community service. Some residents also leave the facility for jobs, at which they earn money to pay restitution to crime victims.

Above: entry detail of the Baker Street facility, which is designed for nonviolent offenders serving sentences in the community

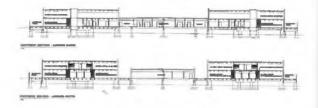
Right: The ground floor spaces of the center are used for classes and other functions.

Far right: corridor

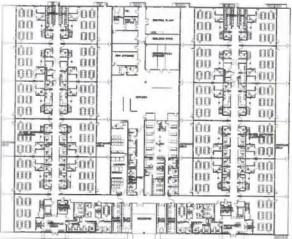


La facilidad penitenciaria de Baker Street, que acomoda 1,120 camas, fue diseñada por Morris Arquitectos. Los residentes de este complejo cumplen sentencias por crimenes no-violentos, por lo cual es una facilidad menos estricta y con mas programas sociales que otras cárceles. Las áreas nocturnas y díurnas fueron separadas para evitar el típico ambiente de prisiones.









14 10

Above: As part of their response to the rehabilitative program of the center, the architects zoned sleeping quarters on the second floor, to avoid the proximity of daytime activities and sleeping areas common in other correctional facilities.

Far left and left: firstand second-floor plans

PROJECT HCCSCD 4& 5. "Baker Street," Houston CLIENT Harris County Community Supervision and Corrections Department,

Houston ARCHITECT Morris Architects. Houston

DEVELOPER North Village Corporation, Houston CONTRACTOR Morganti Texas, Houston

CONSULTANTS CHP & Associates (mechanical, electrical, and plumbing engineering); Walter P. Moore & Associates (structural

and civil engineering); Mulbauser/McCleary Associates (food service); Ulrich Engineers (geotechnical); Dermacon (window wall); Rolf Jensen and Associates (life safety); Hugh G. Henderson Company (laundry)



Above and right: The Harris County Community Supervision and Corrections Department's Conservation Work Program and Boot Camp are housed in manufactured fabric structures chosen in part for the military training-camp associations of their image, as well as the speed and low cost of erecting them.



Estas penitenciarias emplean disciplina militar en el trato de sus prisioneros (a estos, cambio, se les reduce su sentencia). Los edificios consisten de un revestimiento de tejido sintético bajo tensión, que se sostiene de una estructura interna de aluminio. Este concepto innovador, escogido por Morris Arquitectos, permitió completar el proyecto en menos de tres meses.

# **Boot Camp**

by Emily Alexander

MORRIS ARCHITECTS of Houston chose pre-engineered tensioned-membrane structures for this Humble, Texas campus after being asked by Harris Country officials for an alternative to metalskinned buildings. Built in less than three months, the buildings on the site are home for two rehabilitation programs: Boot Camp and the Conservation Work Probation Program, both of which use intensive military-style training as alternatives to serving full sentences. Typically, these programs involve younger inmates who undergo physical conditioning such as running, climbing, and marching. Inmates in the CWP program also maintain county park lands as part of their rehabilitation. Otherwise strictly utilitarian, the buildings feature a full-

PROJECT Conservation Work Probation Program, Humble

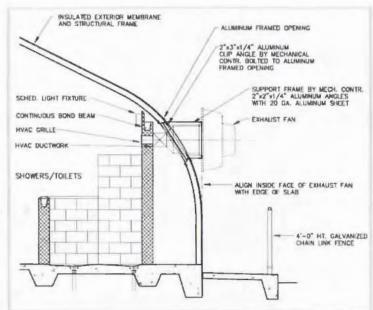
CUENT Harris County Community Supervision and Corrections Department

ARCHITECT Morris Architects, Houston (Chris Hudson, principal; Chris Bartz, project architect)

CONSTRUCTION MANAGER Morganti Texas, Houston (Richard Darrah, project manager; Craig Harden, construction supervisor)

CONSULTANTS Walter P. Moore & Associates, Joe Baldridge, project engineer (structural engineering); CHP & Associates, L.W. Carpenter, project engineer (mechanical, electrical, and plumbing engineering)

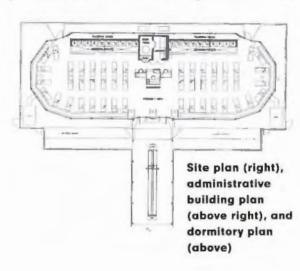


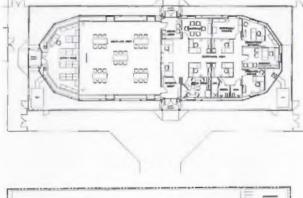


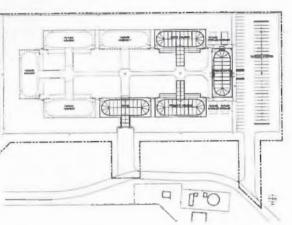




length skylight sewn into the fabric, as well as air conditioning that protects the fabric from deterioration due to moisture. The six completed buildings demonstrate their flexibility by housing a myriad of services including barracks and administration and dining areas. There is also an exterior paved area for drills and marching.



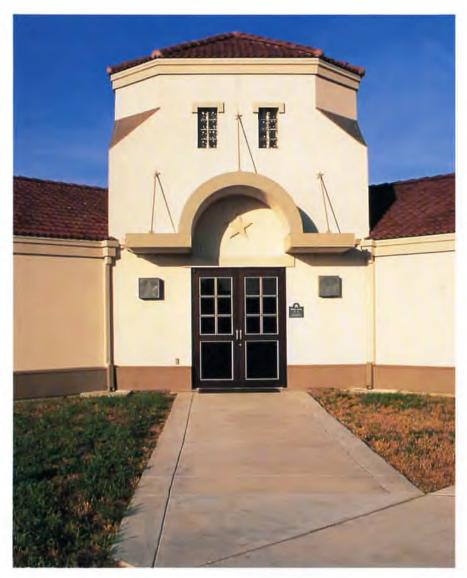


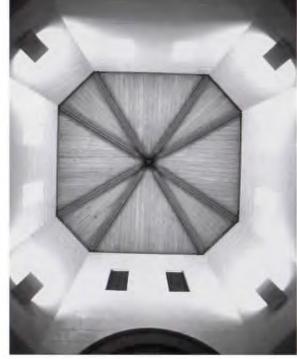


Top left: The medical tent faces the central marching area.

Above and above left: darmitory interiors

Top right: section shows how connection of the structures to the thin foundation is detailed to carry away rain water, and how the air conditioning equipment (rare in a correctional facility in Texas, but needed to prevent deterioration of the fabric structure) is accommodated within the curvature of the structures' walls.





Above: To make the juvenile justice facility fit better in Sinton, Wilson Kullman Architects (now Wilson Kullman McCord) designed the project with massing and finishes intended to recall historic presidio architecture.

Right: A walkway links the buildings, with offices to the left and housing to the right.

Top right: Clerestory windows light the public lobby.



El Centro Juvenil del Condado de San Patricio, diseñado por Wilson Kullman Architects, es una facilidad de detención de 18 camas. Su diseño permite alta visibilidad policíaca en el vecindario, ademas de proveer valor arquitectónico al área con un edificio atractivo. Este centro de detención no proyecta una "imágen institucional" gracias a sus materiales tradicionales y elementos arquitectónicos regionales.

# **Juvenile Justice**

by Mark Denton

FOR ITS DESIGN OF the San Patricio County Juvenile Center, Wilson Kullman Architects (now Wilson Kullman McCord, Inc.) was asked to create a facility that would have a positive visual impact on the surrounding area and increase police visibility in the neighborhood, as well as function as an 18-bed regional juvenile detention facility.

With this in mind, the architects softened the project's institutional image by utilizing traditional materials and incorporating regional design elements—such as "gun-portal" windows—evoking historic Spanish presidios.

Occupying only 3.5 acres of a wooded 10-acre tract, the facility is also designed for expansion in accordance with a flexible, long-term plan. TA









Top: In keeping with the "friendly fortress" image they were aiming for, the architects made the windows on the rear. elevation recall gun

portals on a Spanish presidio.

Above left: lobby

Above: Cells are built to withstand abuse.

PROJECT San Patricio County Juvenile Center, Sinton CLIENT San Patricio County ARCHITECT Wilson Kullman Architects, Corpus Christi CONTRACTOR Moorhouse Con-

struction PHOTOGRAPHER Larry Pearlstone

### KEY TO PLAN

1 LOBBY
2 OFFICES
3 SECURITY VESTIBULE
4 PROCESSING
5 SECURITY AND DAYROOM
6 DINING
7 CLASSROOM
8 KITCHEN
9 FENCED PLAYGROUND
10 FUTURE COVERED DROP-OFF



Above: Constructed with load-bearing concrete panels, the 550-bed Psychiatric Unit in Sugarland is one of three such facilities designed by HOK for the Texas Department of Criminal Justice.

Right: a nursing station

Facing page, left column: housing wing corridor



La Unidad Siquiatrica en Sugarland es uno de tres prototipos diseñados para este tipo de facilidad por HOK.

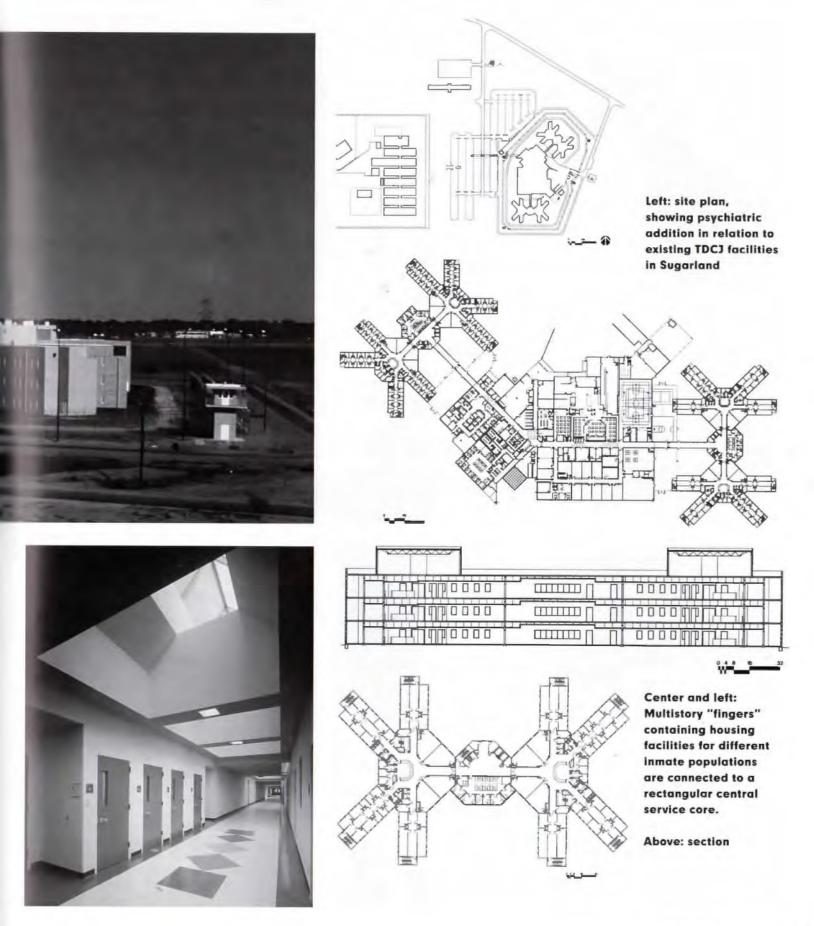
El diseño permite al personal médico y siquiátrico controlar el gran número de internos en un ambiente seguro. Las estructuras estan construídas de paneles prefabricados de concreto. Facilidades adicionales incluyen un gimnasio, lavandería, cocina y servicios médicos.

# **Psychiatric Care**

by Mark Denton

THE 550-BED PSYCHIATRIC CARE UNIT in Sugarland is one of three prototype psychiatric prison facilities designed by HOK for the Texas Department of Criminal Justice. These facilities, which total 1,550 beds in approximately 750,000 square-feet, enable psychiatric and medical staff to monitor inmates in a secure environment.

The Sugarland project consists of a one-story administration building and four three-story housing towers, all constructed from load-bearing precast concrete panels. One of the four towers is a continuing care wing, with 300 beds for elderly inmates. Support facilities include a gymnasium, laundry, and kitchen, as well as medical and dental clinics.







PROJECT Texas Department of Criminal Justice Psychiatric Facility Addition, Sugarland

CLIENT Texas Department of Criminal Justice (Thurman Jacks, Michael O. Collins, Ron Howell)

ARCHITECT Hellmuth, Obata & Kassahaum, Dallas

CONTRACTOR Carothers Construction Co, Water Valley, Miss. (Ben Logan, project manager)

CONSULTANTS The

Douglass Group (medical programming): Busby
Denny International (construction cost management); Walter P. Moore & Associates (structural and civil engineering); Rolf Jensen & Associates (codes); Latta Technical Services (security engineering); Mulbauser/McCleary (food service)

PHOTOGRAPHER

BlackmonWinters Photography Above: housing-wing elevation

Left: a waiting area near the front gate

### Resources

### Three Rivers **Federal Correctional Institution** Hellmuth, Obata & Kassabaum, Inc. pp. 46-47

Metal studs: Dietrich Industries; ceramic tile: American Olean Tile; acoustic ceiling: Donn Products; plastic laminate: Wilsonart; firestop: 3M; hardware: Russwin, Corbin; controls: Barber Colman, Johnson Controls; dock leveler: Rite-Hite

#### **Oklahoma State Penitentiary Addition Burton, Knowles & Love** and

### Henningson, Durham & Richardson, Inc. pp. 50-51

Pre-cast concrete frame, wells, floors, and roof: Coreslab Structures, Inc.; skylights: Naturalite; hollow metal entrance and interior doors: Southern Steel Co.; interior floor sealant: Sonneborn; ceiling system: USG; built-up roof: Schuller International (Manville); security sealant: SIKA; joint sealants: Tremco; drywall/steel-stud partitions: USG; interior latex paint: Sherwin-Williams; fire alarm: Edwards; security grilles, hardware, doors, and locks: Southern Steel Co.; hydraulic elevator: Dover; exterior lighting: General Electric; switchboards and transformers: Westinghouse Electric; trap primer valve: Sloan; sprinkler heads: Central Sprinkler Co.; forced-air heating and cooling system: Hastings; carpet tiles: Bigelow; telephones: Atlas; surveillance: RCA

### Daniel Webster "80 John" Wallace Unit JPJ Architects, Inc. pp. 52-55

Prefabricated metal buildings: Midwest Steel Building Company; precast modular cells: H.B. Zachry; aluminum storefront exteriors: PPG Industries; aluminum windows: Alenco; detention doors: Willow Products Co.; overbead steel doors: Kinnear; resilient tile: Tarkett; carpet: Stratton; ceiling system: USG; single-ply membrane roofing: Genflex Roofing Systems; styrofoam board insulation: Composite Technologies, Inc.; accordion folding partition: Modernfold; hinges: Hager; locksets: Schlage; door closers: Norton; detention locks: Southern Steel Co.; laundry equipment: Pellergrin Milnor Corp.; signage: ASI Sign Systems; stairs and handrails: Beck Steel; water closets: TDCJ Industries; showerbeads: Bradley; bathroom accessories: Gamco; sprinklers: Grinnel; prison cell furniture: TDCJ Industries

#### **Substance Abuse Treatment Facility** DMJM/Jones & Kell pp. 56-57

Concrete foundation: Ingram Enterprises; pre-engineered buildings: Butler; drywall and masonry: Featherlite; windows: EFCO Corp.; aluminum and glass doors: Jenning Glass; plastic laminate doors: Wilsonart; overhead doors: Butler; concrete exterior paving: Ingram; brick pavers: Summitville; acoustical ceiling: Celotex; metal roofing: Butler; sealant: Sonneborn; insulation: Owens Corning; drywall partitions: Georgia-Pacific; masonry partitions: Featherlite; exterior paint: Butler, Sherwin-Williams; interior paint: Sherwin-Williams; hinges: Hager; locksets: Schlage: door closers: LCN; panic exit: Von Duprin; security hardware: ISI Detention; signage: The Southwell Co.; exterior lighting: ISI, Lumalier; interior lighting: Lithionia, Failsafe; tubs, lavatories, water closets: Crane; showerheads: Acorn; flush valves: Zorn; toilet stalls: Mills Co.; bathroom accessories: Gamco; water fountains: EBCO; heating system: Reznor; air-conditioning system: Slack-Buckner; Carpet: Philadelphia

### HCCSCD 4 & 5, "Baker Street" **Morris Architects** pp. 58-59

Concrete grade-beam foundation: Morganti Texas, Inc.; precast concrete frame and walls: East Texas Precast; Flushlok II thermal system windows: Pittco; Flushlok II aluminum entrance doors: Pittco; hollow metal interior doors: Pearland Industries: rolling coiled overhead door: Overhead Door Corp.; sprayed acoustical insulation: International Celluose; ceiling panels: USG; Permaply IV roofing: Owens Corning; silicone sealant: Dow Corning; exterior polyurethane paint: Sherwin-Williams; interior epoxy coating: Sherwin Williams; full mortise hinges: Hager; mortise locksets and door closers: Corbin Russwin; panic exit: Monarch; lock cylinders: Best Lock Corp.; kitchen equipment: Hobart; washers: Washex; dryers: Cissell; computers: Dell Computers; security video system: Vicon; lockers: KLN Steel Products; steel furniture: Associated Building Products; hydraulic elevator: Dover Elevator; custom stairs and handrails: Miscellaneous Specialties; exterior metal halide lighting: Quality; interior fluorescent; Kenall; lavatory: Crane; hydrapipe showers: Symmons Industries; hydro-flush valves: Delany; toilet stalls: Knickerbocker; security bathroom accessories: Bradley; water fountains: Elkay; fire sprinklers: Firecheck; forced-air heating and cooling system: Carrier; environmental control: Honeywell; carpet: J & J Industries; task lighting: Harpers; modular partitions, metal desks, and lateral filing system: Harpers; custom millwork cabinets: Starcraft interiors; conference table: Falcon; public seating: Moduform; chairs: Harpers; aluminum blinds: Bali

### **Harris County Conservation Work Probation Program Morris Architects** pp. 60-61

Pre-engineered structure: Sprung Instant Structures, Inc.; wall surfacing: Seaman Corporation; interior doors: Door Pro Systems; concrete sealer: Dayton Superior Corp.; vinyl flooring: Azrock; resinous sealant: Dex-O-Tex; ceiling system (administration area): USG; metal roof (storage building): Berridge Manufacturing; masonry coating: Tnemec Company, Inc.; galvanized aluminum fencing: Armorlink; interior paint: Devoe; hinges: Hager; locksets: Sargent; electromagnetic exit locks: Locknetica; icemaker: Ice-O-Matic; washer and dryer: Speed Queen; floodlights: Ceramalux; canopy lights: Fail Safe; interior lights: Kenall; lavatories: Acorn; bathroom accessories: Bobrick; sprinklers: Reliable

### San Patricio County Juvenile Center Wilson & Kullman Architects pp. 62-63

Suspended concrete foundation: Alamo Cement; load-bearing concrete-masonry-unit walls: Featherlite; wood trusses: Trussway; steel beams and joists: Western Steel, Vulcraft/Nucor; exterior wall surfacing: STO; steel door frames: Ceco Door Products; aluminum entrance doors: Kawneer; interior doors: Buell Door Co, Glitsch Detention; rolling overhead door: Cornell; rolling kitchen door: Cornell: rubberbase flooring: Roppe; quarry and ceramic tile: Dal-Tile; carpet: Karastan, Bigelow; vinyl: Azrock Industries; epoxy: Devoe; ceiling system: USG; built-up roof: Schuller International (Manville); concrete tile roofing: Life Tile; metal roofing: MBCI; glass block: Pittsburg Corning; interior epoxy coating: Devoe & Raynolds; hinges: Hager; locksets and door closers: Sargent; kitchen and laundry appliances: General Electric; securitydoor controls, public-address, and fire alarm: Simplex; lockers: Penco; interior and exterior signage: C.C.S.W.; chalk and tack boards: Best-Rite; fire extinguishers and cabinets: Larsens; roof hatches: Bilco; security lighting: Marx Lighting; lighting: Lithonia; lavatories and fixtures: Kohler; security fixtures: Acorn; flush valves: Sloan; plastic toilet stalls: General Partitions: bathroom accessories: Bobrick; security accessories: Acorn; water fountains: Halsey-Taylor; gas-fired and electric heat: York; rooftop and split-system air-conditioning units: York

#### **TDCJ Psychiatric Facility** Hellmuth, Obata & Kassabaum, Inc. pp. 64-66

Metal studs: Dietrich Industries; EIFS: Corev; concrete masonry unit joint reinforcing: Hohmann & Barnard, Inc.; concrete patching: Sika Corp.; EJ covers: Construction Specialties, Inc.; grout: Five Star Grout; EPDM: Firestone Building Products; skylights: Bristolite; firestop: Dow Corning, 3M; Floor tile: Armstrong; tile: Dal-Tile Corp.; plastic laminate: Wilsonart; special coatings: Porter; paint: Sherwin-Willams; security hardware: Folger Adams Co.; hollow metal doors: Steel Door Industries; access doors: Nystrom, Inc.; overhead door: Overhead Door Co.; millwork: Quality Millwork, Inc.; closers: LCN; elevators: Dover; transformers: Brown/Boverie; chillers: York; water heaters: Rheem; boilers: Cleaver-Brooks; controls: Landis, Gyr Powers; display boards: Alliance Wall Corp.

# Survey

**New Downtown Jails DOWNTOWNS** Morris Architects hos designed new "state jail" prisons for downtown Dallas and downtown Houston.

**Sketches of Spain** TRAVELS Paul Blumenthal came back from a visit to the Iberian Peninsula with an evocative sketchbaok and some powerful paintings.

70 **House in Highland Park** ARCHITECTURE Juris Laivins collaborated with NGL Design on redesigning a fine old house.

71 Office of Good Design INTERIORS Ibanez Architects does a lot with a little in a Dallas office.

Index to Advertisers 72

73

74

Marketplace What should a Prison

**Products and Information** 

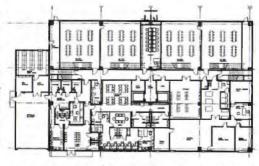
Sound Like? 76 TA SPECIFIER Acoustical consultant Jack Evans describes some standards for controlling noise in correctional facilities.

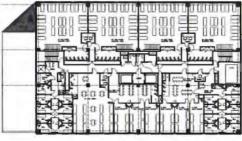
### **New Downtown Jails**

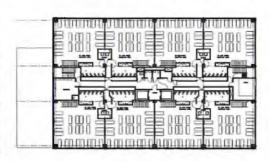
DOWNTOWNS The "state jail" program of new prison facilities for nonviolent felons will have a noticable impact on downtown Houston and downtown Dallas, where Morris Architects, with developer North Village Corporation and construction company Morganti Texas, all of Houston, are building the first state jails to come on line. Officials consider the downtown location a plus for a program focusing on rehabilitation, restitution, and community service.

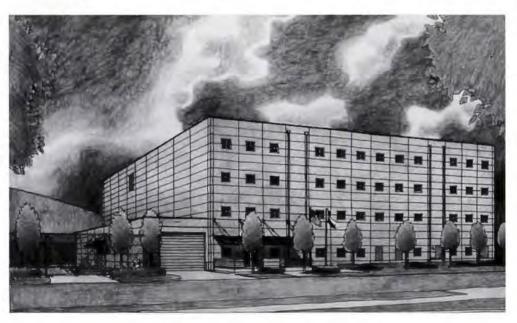
In Houston, the project is a 61,600-squarefoot, four-story building for 667 inmates, constructed of insulated precast concrete panels on a cast-in-place concrete frame. The dormitory areas, in 48-bed units, are arranged on upper floors, with day-room and classroom areas on lower floors, connected by inner stairs. Food service and clinical functions are shared with another nearby Harris County Community Corrections facility.

In downtown Dallas, the new state jail will be a 10-story building of 232,750 square feet, housing up to 2,000 inmates, constructed with brick-faced concrete panels on a cast-in-place concrete structure. Most of the space will be used for dormitories and daytime classrooms and dining rooms, with such inmate-support facilities as four double-height indoor recreation areas, a laundry, and a clinic. 7WB









Above: rendering of the new state iail in downtown Houston

(top), second floor (middle) and fourth floor (bottom)

Plans show first floor Facing page, top: rendering of new state jail in downtown Dallas



### **Sketches of Spain**

TRAVEL A travelling fellowship gave architect Paul Blumenthal of Houston the opportunity to spend four months on the Iberian penisula. He used the opportunity to produce 18 sketchbooks of pen-and-ink and pencil drawings, 60 watercolors, and 10 large water-



based media paintings. Subjects included landscapes, gardens, urban complexes and buildings, as well as bullfighting and figure studies. SW



Left: "El Bosque Platano," goache Above: "Ronda: Puente Nuevo," brush and ink

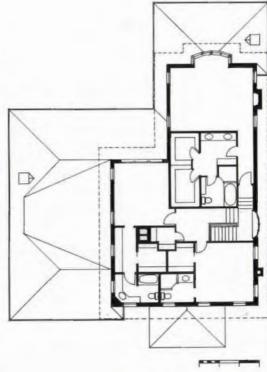


Above: "Ronda Recuerda," pen and ink

### **Highland Park House**

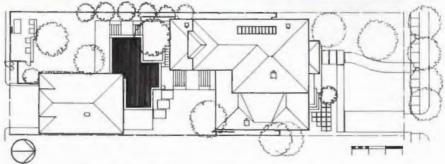
ADDITIONS The owners of this Highland Park house and Juris Laivins, Architect, collaborated from the start on the renovation and remodeling of a Texas prairie-style house. The architect then assembled a team of an interior designer, landscape architect, and lighting and sound consultants who took everything from the owners' taste in furniture to existing large trees into account to ensure a successful design. To take advantage of the eight-foot elevation difference between the front and rear of the property, landscaping, terraces and walls were used to modify and accentuate the slope. Two differently textured stuccos-a rough finish on the lower level and a smooth on the second-reflect the prairie style. Soffit detailing and extensive windows create a striking exterior as well as giving the interior plentiful views of the property. Emily Alexander











Above: site plan

PROJECT House in Highland Park

ARCHITECT Juris Laivins, Architect, Dallas

INTERIOR DESIGN NGL. Designs, Nancy Leib LANDSCAPE ARCHITECT

Armstrong Berger Landscape

CONTRACTOR Charles Hoback General Contractor

PHOTOGRAPHER James F. Wilson

Above and above elevations, House right: front and rear in Highland Park

RESOURCES: Exterior insulation material: Dryvit; stucco: Trinity; terrace stone and interior marble: Custom Stone Supply; interior gypsum board: U.S. Gypsum Co.; windows: Marvin Windows; skylights: NaturaLite/EPI Inc., Velux; patio doors: Marvin Windows; garage door: Overhead Door Co.; composition roofing shingles: GAF; interior and exterior sealants: Pecora; batt insulation: Owens Corning; paint and stain: Sherwin-Williams; locksets: Schlage; butt hinges: Stanley Hardware; threshold and weatherstripping: Pemko; fireplaces: Heatalator Inc.; plumbing fixtures: Jado; lavatory, tubs, toilets: Kohler Co.; den rug: Scott Group; bath sconces: Boyd Lighting



Above: A glass wall expands the visual space of the conference room.

Above right: corridor from the lobby

Right: The open studio area features custom-built birch-and-steel workstations.

Bottom right: principal's office

Below: Plan; entry is at top right.





PROJECT Office of Good Design, Dallas
CLIENT Good Design, James Good, President
ARCHITECT Ibanez Architecture (Gregory Ibanez,
AIA, Principal-in-Charge)
CONTRACTOR A. A. Bragg Co., Andy Bragg, project
Manager

#### RESOURCES

—ு ⊕்

New walls: metal studs; wall surfacing: corrugated galvanized steel panels, Vic West Steel; doors: yellow pine/glass; carpet: Shaw Industries; paint: Devoe & Raynolds; hardware: Hewi, Inc.; lighting: Halo L755, PAR lamps, fluorescent; partitions: job-built, (birch) wood; desks: Ron Rezek "Cable" and "Squiggle" desks; chairs: Herman Miller "Equa" upholstery; fabric: Unika Vaev "Annapolis"; pedestals/files: Meridian; millwork: custom

### Low Cost, High Impact

INTERIORS Using a colorful and inexpensive palette of materials, Ibanez Architecture of Dallas has created a stylish package for the offices of a Dallas graphic-design firm. The firm asked for two offices, a conference room, reception and lunch areas, and open-plan studio space to occupy 2,250 square feet in the corner of the White Swan Building in the city's West End.

The building's heavy-timber and brick construction was left exposed. The requirements of the program were met with only minor interventions—essentially three new walls that divide the space. Drawing from the existing industrial vocabulary of the building, corrugated galvanized-steel panels clad the curving walls defining the reception area and the conference rooms, while a bright blue clapboard wall separates the offices from the studio space. In the studio, custom-designed and -built birch partitions define individual work areas.

The heavy nature of the walls and finishes is relieved though the use of generous areas of glazing in the conference room and carefully proportioned windows along the interior office wall.

Completed for approximately \$7.50 per squarefoot, the project shows that good design doesn't have to be expensive. *Emily Alexander* 



telephone, and PA-speaker noise, along with impact noises such as exercise-room foot falls and ball bounces, can also be analyzed for effect in the source room or adjacent spaces.

### **Solution Applications**

ARCHITECTURAL ACOUSTICS solutions for most correctional facilities focus on controlling reverberation in dayrooms, dining/assembly halls, and exercise/gym rooms. Smaller spaces, including classrooms, vocational shops, inmate cells or housing units, and administrative offices and conference rooms should also be treated. Security and maintenance require that sturdy, abuse-resistant materials be used wherever inmates have access. Rugged new acoustical products developed specifically for correctional facilities are now available. Several manufacturers produce cost-effective, acoustically absorbent surface finishes, including "Alcan" or "IAC" perforated-metal panels, "Tectum" secure ceiling systems and wall panels, and "Pyrok" cement concrete or gypsum-based acoustic plaster. While most applications are planned for installation out of the reach of inmates, the cement-based plaster can resist abuse at floor levels, particularly in direct-supervision areas.

Sound-isolation and acoustical-privacy separation design in walls, doors, windows, ceilings, and floors may involve use of high-mass materials or unbalanced and decoupled barrier elements, depending on the construction system desired by the architect and building user. Decoupled elements—two or more mass layers separated by resilient layer(s)—are generally a necessity where impacts are common. Sound-isolation design must consider location and detailing of flanking paths or acoustical leaks in the room envelope, resulting from ducts, pipes, conduits, lights, or electrical fixtures, and doors.

HVAC noise has traditionally been controlled in a haphazard manner by assuming that internally lined ducts and elbows would quieten the fan noise. Now, however, most public-sector owner-agencies mandate use of unlined sheet-metal ducts to avoid growth of microbes and airborne transmission of various contaminants, so control of noises from fans, fittings, and velocity in ducts will need to be accomplished with passive duct-attenuator elements. These noise traps should be sized and selected carefully to control pressure drop and additional noise generation. Active-noise-cancellation systems may be employed in specialized

cases. In general, fan-noise attenuators should be located as close to the air-handler or mechanical-equipment room as possible. High-frequency attenuators, such as insulated flexible-duct connections to supply diffusers or boots, should be located as near the end of the air-distribution system as possible, to attenuate noise generated in the duct system. Most important, return- and supply-air distribution paths must be considered equally.

Electrical noise sources in occupied spaces, such as ballasts for vapor lamps, should be enclosed or remotely located. Pipes for chilled or hot water or plumbing should not be routed above or through sleeping, classroom, conference, and other quiet spaces, unless enclosed or lagged with decoupled, high-mass noise-containing materials.

Central-plant and emergency-generator equipment should be located remotely from inmate housing and dayrooms. Indoor generator rooms should have noise attenuation for inlet and radiator discharge openings, in addition to mufflers for exhaust pipes. Vibration-isolation systems should be employed for rotating-shaft, reciprocating, and impact sources, as well as attached ducts, pipes, and conduits.

### Post-Design Assurance

AFTER PROGRAMMING, planning, and implementing acoustics and noise-control solutions in architectural and engineering contract documents, diligence must be maintained in "value engineering," bidding, and construction phases to assure materials and installations that meet design intent. Post-construction validation measurements of vibration and noise should be conducted by qualified acoustical consultants or according to established standards. Rooms failing to meet criteria should be evaluated for unexpected flanking paths, improper or incomplete installations of acoustical and noise-control elements, on-site modifications of design, or other anomalies. Good planning efforts will create correctional facilities with acceptable acoustics and background noise levels that do not endanger the health of staff and inmates. Integration of acoustical solutions into architectural and engineering designs can provide these benefits with little, if any, additional cost or compromise to security. Fack Evans

Jack Evans is principal of Jack Evans & Associates, Austin, vibration, acoustics, and noise consultants.

### **Index to Advertisers**

| Page  | Advertiser                             | Circle No       |
|-------|--|-----------------|
| 17    | AIA Trust                              | 14              |
|       | Airteq                                 |                 |
| 9,40  | Alamo Concrete                         |                 |
|       | Alenco                                 |                 |
|       | Association Administrators and Consul  |                 |
|       | Berridge Monufacturing                 |                 |
|       | Black Millwork                         |                 |
| 38    | Bomonite                               | 113             |
|       | Boral Brick                            |                 |
|       | Capital Rubber Stamp                   | ************ T1 |
|       | Chemical Lime Company                  |                 |
|       | Cloyworks                              |                 |
| 75    | Crawford-Friend Consultants            | 0/              |
|       | Devoe & Raynolds                       |                 |
|       | Early Texas                            |                 |
|       | Energy Blanket of Texas                |                 |
|       | Jack Evans & Associates                |                 |
|       | Feotheritte Building Products          |                 |
|       | First Defence                          |                 |
| 4     | Folger Adam Company                    | 04              |
|       | Fuller Dyal & Stamper                  |                 |
|       | Glass Block Shop                       |                 |
| 41,/3 | Court Court 2000                       | 104             |
|       | Great Southern Supply                  |                 |
|       | Hohmann & Barnard                      |                 |
|       | James Hardie Building Products         |                 |
|       | Jewell Concrete Products               |                 |
|       | Mark Correctional Systems              |                 |
|       | Marvin Windows                         |                 |
|       | Mosonry & Gloss Systems                |                 |
|       | Masonry Institute                      |                 |
|       | Midwest Steel                          |                 |
|       | Miller Blueprint                       |                 |
|       | Morganti Texas                         |                 |
|       | Morris Architects                      |                 |
|       | Mortar Net                             |                 |
|       | Naturalite/EPI                         |                 |
|       | OMC Industries                         |                 |
|       | Povestone Company                      |                 |
|       | Pavex                                  |                 |
|       | Petersen Aluminum                      |                 |
|       | Professional Lines Underwriting Specia |                 |
|       | Schacht Lighting                       |                 |
|       | Secure, Inc.                           |                 |
|       | Southern Building Code Congress Int'l. |                 |
|       | Southwestern Brick Council             |                 |
|       | Stairways, Inc                         |                 |
|       | Tectum, Inc                            |                 |
|       | Texas Kiln Products                    |                 |
|       | The End                                |                 |
|       | The Southwell Company                  |                 |
| 6     | United States Gypsum                   | 50              |
|       | Walter P. Moore and Associates         |                 |
|       | What its Worth                         |                 |

### PRODUCTS AND INFORMATION

Safety Surface Plus, a new product from AE-GIS Floorsystems, is a non-skid transparent coating for vinyl, sealed-concrete, and other smooth-surface floors. Using SR-1 polymer particles, the easy-to-apply coating



increases friction to insure a slip-resistant surface, even when wet.

Circle 165 on reader inquiry card

The new Detention Specialties brochure now available from J.L. Industries features security panels and cabinets, including the new Lift-Out High Security Panel, a formed plate- steel door that uses a hingeless design useful in prison and dentention areas where removal of doors is necessary.

Circle 166 on reader inquiry card



Bomanite Corporation has developed a line of chemical stains that "color-etch" new or existing concrete surfaces. Available in eight standard colors, the stain is a combination of metallic salts, water, and acid, that reacts with the concrete to form permanent color in mottled tones. The stain can be used on interior and exterior concrete surfaces, as well as porous tile, stucco, and marble.

Circle 167 on reader inquiry card

Loc-Blocks from CORTECH, an alternative to glass blocks, are manufactured of LEXAN resin from GE Plastics. Nearly 200 times as strong as glass, Loc-Blocks are also a quarter the weight, shatter-resistant, scratch-resistant, and have a 25 percent better insulating value than glass.

Circle 168 on reader inquiry card

The new F Series of colored framed door cabinets from Robern uses anodized aluminum and glass to create a modular display system suitable for all areas of the home. The cabinets, which can be assembled with



Robern Series M cabinets, mirrors, light fixtures, and sink modules, are available in a wide range of sizes and colors.

Circle 169 on reader inquiry card.



Code Blue Corporation now offers a vandal-resistant "Security Alert" emergency station for parking lots. A single button will phone office security or 911 and set off a 1.5-million-candle-power strobe light that

flashes a blue distress signal. The nine-foottall station is self-illuminated and coated with a graffiti-resistant high-gloss finish, making it easy to locate and durable.

Circle 170 on reader inquiry card

In February, the National Institute of Building Sciences will lower the price of a one-year subscription to its Construction Criteria Base CD-ROM system to \$750 from \$970. The system provides a self-updating library of more than a million pages of federal and private guide specifications, codes, standards, manuals, regulations, CADD libraries, and other criteria related to building design and construction. Circle 171 on reader inquiry card



A new keyed removable mullion from Von Duprin allows double doors to function like single doors. When a large opening is required, the mullion can be removed from double doors with a simple key-cylinder operation; no key is needed for locking once the mullion is re-installed.

Circle 172 on reader inquiry card

### Windows and Doors

INDUSTRIAL ACOUSTIC COM-**PANY now offers** their Noise-Lock Acoustic Doors with a wood-veneer finish. The veneer, lami-



nated to steel doors, is available in birch, maple, oak, and other popular woods to faciliate coordination with the surrounding design.

CIRCLE 173 ON READER INQUIRY CARD

CertainTeed Architectural Shapes, a line of vinyl windows from CERTAINTEED CORPORATION, is available in numerous



stock and custom shapes and sizes at about half the price of similar wood windows.

CIRCLE 174 ON READER INQUIRY CARD



The new Casement T-Bar from SPECTUS SYSTEMS can be used to install two panes of glass next to each other, creating window walls

within fixed units. CIRCLE 175 ON READER INQUIRY CARD

A new energy-efficent aluminum window from JORDAN provides a thermal barrier by blocking heat flow through the window sash and frame, preventing condensation and frost from forming on the inside of the window. CIRCLE 176 ON READER INQUIRY CARD





Circle 39 on the reader inquiry card



Circle 87 on the reader inquiry card

Marketplace is an effective and inexpensive way to reach architects, contractors, specifiers, and clients in Texas. Display advertising begins at \$80 per column inch with a one-inch minimum; business cards are \$240. Color ads are also available starting at \$480. Ask your TEXAS ARCHITECT advertising representative about frequency discounts, classified ads, and typesetting services. Or call 512/ 478-7386 for more details.





### Clayworks

Hand-inscribed pavers: a proven fundraising tool, a superb building material.

1209 E. 6th St. Austin TX (512) 474-9551



Circle 121 on the reader inquiry card

### THE JUICE

A ROMANTIC DESIGN COMPETITION

CHARGE: A "GARDEN OF JUSTICE" FOR L.A. JURY: MOSS, VAN LENGEN, ISRAEL, SOLOMON, FERRIER, KAHN, IZENOUR AND MORE FIRST PRIZE: \$10,000

REGISTRATION: \$50; OPENS JANUARY 1, 1995 SUBMISSIONS DUE: MEMORIAL DAY 1995

THE END P.O. BOX 1332 CULVER CITY CA 90232 U.S.A. TEL/FAX 213-296-6226

Circle 132 on the reader inquiry card



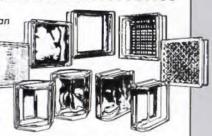
Circle 234 on the reader inquiry card





Wholesale and Contractor Sales of PC GlassBlock and Accessories

The Glass Block Shop can meet your design goals with Pittsburgh Corning's versatile, exciting range of glass block styles, patterns, and special shapes. Enjoy friendly, knowledgeable service.



### The Glass Block Shop **Master Distributor**

(214) 243-7343 (800) 777-2107 Fax (214) 243-3666

Dallas • San Antonio • El Paso • Oklahoma City

Circle 104 on the reader inquiry card

Crawford · Friend 3003 Bledsoe Street Fort Worth, Texas 76107 - 2905 817 - 336 - 8886

Arenas Churches Auditoriums Commercial Residential

Non-proprietary consultation, design, and specifications for Lighting · Dimming · Sound · Acoustics · Rigging · Draperies Sightline Studies · Audio/Visual · Theatre Safety Assessments Theatre Planning · Projection Systems · Feasibility Studies

Consultants Specializing In Performing Arts Technology And Planning

Circle 96 on the reader inquiry card



- 100-year-old Heart Pine Flooring
- Early Texas Style Furniture
- Heart Pine Doors, Cabinets, Millwork

(512) 243-2702

10209 FM 812 Austin, Tx. 78719

Circle 225 on the reader inquiry card

### What Should a Prison Sound Like?

PRISONS ARE HARD, tough places, and they sound like it. Architects know that enclosing a space with predominately hard, reflective surface finishes will result in reverberant, noisy spaces. Mechanical designers know that equipment selection and duct layouts determine system noise levels. Electrical designers know that light-ballast and engine-generator noise affect indoor and environmental noise levels.

Yet, a visitor to many modern correctional facilities could easily assume that noise was never considered in the design process.

It's easy to understand why: Budgets do not support extravagant design luxuries. Security and maintenance requirements prohibit use of fragile materials. Energy-efficiency requirements for mechanical and electrical systems overshadow operational concerns. Sure, we would like to have good acoustics, but after all, these facilities are for incarceration of criminals.

Design professionals should ask "What are the purposes of these facilities?" Are they purely punitive, or are they correctional facilities for training and rehabilitation? Is it safe to subject staff and inmates alike to intolerable environments known to induce stress and antisocial behavior? As practitioners of a state-licensed design profession, is it ethical to ignore issues that could help create more efficient, secure, and successful correctional environments?

The fact is that good acoustics and noise control can be achieved economically without jeopardizing security. The design process is simply incomplete if acoustical problems are not defined, analyzed, and solved as part of the architectural and engineering design effort. A correctional facility's professional design team should include knowledgeable and experienced acoustical consultants to assist with interpretation of criteria, determination of potential noise or acoustical problems, analyses of architectural and engineering schemes, and development of design solutions.

### Source, Path, Receiver

ACOUSTICS and noise control deal with three basic variables: the source, path, and receiver of sound. Of these, the receiver is the most complex and hardest to quantify and deal with; architectural and engineering designers can achieve the greatest effect on source and path variables, although these must go beyond typical "rule-of-thumb" band-aids. Attenuation or modification of noise sources is often feasible

for mechanical and electrical equipment, but much less so for (inmate) occupants. Barriers in the path of sound can reduce transmission. Sound that reflects off room walls, floors, and ceilings is affected by the surface characteristics.

### **Acoustical Criteria**

HOW MUCH noise is too much? Architectural designers need to consider the types of spaces that will be created, and the facility's design and operational parameters, to assess the noise impact on the various functional areas. And they should remember that it is neither precise nor efficient to say that rooms should be "quiet."

Some groups have put together acoustical criteria, although these are not always useful. The American Correctional Association (ACA), for example, in its *Standards for Adult Correctional Institutions* (third edition), says "Noise lev-

In Texas prisons today,
designers routinely ignore
acoustical issues that can
affect stress and anti-social
behavior. But these issues
can be addressed
economically without
jeopardizing security.

els in inmate housing units [shoold] not exceed 70 dBA in daytime and 45 dBA at night." But the ACA standard is believed by many to be inadequate, since it is vague as to whether the controlled variable is continuous background noise level of an unoccupied room (primarily HVAC noise), or occupant-generated noise (including speech, radios, TVs, and PA systems), and because, in either case, the ACA's stated levels may be excessive. The 45-dBA level is associated with known sleep-disturbance levels, and the daytime level is louder than average conversational speech; it would require staff and inmates to speak in raised voices. Finally, the ACA standard disregards fatigue and annoyance due to low-frequency rumble.

The Advisory Council on Corrections and Acoustics, a board of corrections officials, architects, and acoustical consultants, has developed better criteria. The following chart, from the group's 1993 publication, "Acoustics Design Guide for Corrections," shows recommended acoustical design goals for correctional facilities.

| Functional Space                     | Background  | Reverberation   |
|--------------------------------------|-------------|-----------------|
|                                      | Level (dBA) | @ 500 Hz (sec.) |
| Administrative Offices               | 45          | 0.90            |
| Conference Rooms                     | 35          | 0.75            |
| Classrooms                           | 40          | 0.75            |
| Clinic or Infirmary                  | 45          | 0.90            |
| Dayrooms                             | 50          | 1.50            |
| Dining Areas                         | 45          | 1.50            |
| Exercise Rooms                       | 50          | 1.50            |
| Housing Units                        | 40          | 1.00            |
| Shops-Vocational                     | 70          | 1.50            |
| Shops—Maintenance<br>& Manufacturing | 75          | 1.50            |

For the purpose of specifying smooth-spectrum ambient-sound levels (avoiding tonality or unbalanced spectrum annoyances), acoustical consultants recommend use of Noise Criteria (NC) of Room Criteria (RC), as characterized by ASHRAE (1991 HVAC Applications, Chapter 42, Sound and Vibration Control), and used for engineering design of most commercial and institutional building projects.

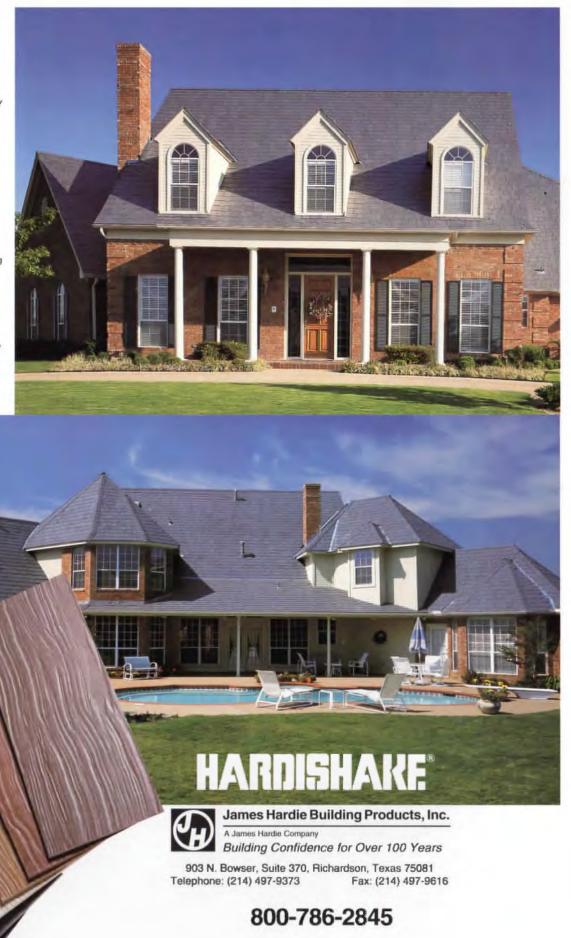
### **Analysis and Design**

THE ACOUSTICAL CONSULTANT will analyze large open spaces for reverberation based on room size, shape, volume, and surface finishes, comparing projected reverberation times for various spaces with the criteria to indicate what kind of changes are necessary and how much surface area should be affected. Review of adjacent space functions and ambient sound-level spectra will determine how much sound-transmission loss is necessary in each audible octave. Impact transmission can significantly change barrier-design requirements. The varying needs for low-, mid-, and high-frequency noise reduction prescribe certain wall, floor, and ceiling designs. Analysis of the fan noise generated by air handlers and exhaust fans, and the system attenuation provided by the combination of air distribution system and room losses, will project the room's mechanical sound level. This continuous background sound level may be compared to the noise criteria to determine how much additional attenuation, if any, is needed to achieve permissible levels in each type of space. Other sound sources, such as light-ballast noise radiation, radio, television,

"Prison Noise," continued on page 72

### Hardishake®, Value and Protection to Last a Lifetime.

- Hardishake roofing blends the beauty of wood shingles and slate roofs and can be installed to achieve a Class "A" fire rating.
- Unlike other materials, Hardishake roofing won't burn and is immune to the damaging effects of the sun, heat, moisture, termites and hurricane force winds.
- Hardishake roofing is so strong, it can even be walked on without breakage.
- Built to last a lifetime, Hardishake roofing is backed by a transferrable 50-year product warranty. For looks, longevity, value and fire protection, you just can't beat Hardishake Roofing.



Circle 47 on the reader inquiry card



"I read Texas Architect."

Ronald L. Skaggs, FAIA, Chairman and CEO

HKS, Inc.

Dallas

"I read Texas Architect."

Natalye Appel, AIA, Principal

Natalye Appel Architects

Houston





"I read Texas Architect."
Elizabeth Chu Richter, AIA, Principal
Richter Associates, Architects, Inc.
Corpus Christi

"I read Texas Architect."

Luis Figueroa, AIA, Principal
Rike•Ogden•Figueroa/Dickson•Wells Architects
McAllen, Dallas, Harlingen



# ...including the ads.

TEXAS ARCHITECT readers are designing the state's largest private and public buildings, expanding their practices into international markets, and rewriting the definition of design. Sound like the kind of people you want to reach? Call us to find out how TEXAS ARCHITECT can help present your product or service to this valuable group of potential customers.

Carolyn Baker 512-929-9038 National Representative (outside Houston area)

Ray Don Tilley 512-303-7703 Advertising Representative (Houston area)

Mark Denton 512-478-7386 Texas Architect Associate Publisher