# SCAIA REVIEW OF ARCHITECTURE 88/89 SOUTH CAROLINA CHAPTER/THE AMERICAN INSTITUTE OF ARCHITECTS



AL

1111 11

-

11

# Architectural photography, inside and out.

DRESSLER

For additional samples of our work please call (803) 254-7171

# TERR R A Z Z O

#### IT ONLY LOOKS EXPENSIVE.

Terrazzo offers the best cost value and durability for most flooring applications. Let David Allen Company assist you with budget prices, technical information and specifications. For more information call: Raleigh, NC (919) 821.7100 Washington, DC (703) 690.4422

Orlando, FL (407) 420.1000

SINCE 1

SCAIA REVIEW

1

DAVID ALLEN CO.

# Offer A Dramatic Difference...Morgan Oak Doors.



Berkshire Abbey OAK-5870 Door with OAK-5971 sidelights

More and more discriminating homeowners are opting for the dramatic difference which oak adds to their home. You can take advantage of that trend with a Morgan oak door which brings the full beauty of this unique wood to the entry. And continues throughout the home with interior doors and bi-fold closet doors.

The appeal of Morgan oak doors lies first in the beauty of the wood, but there's more. Double hip-raised panels create interesting shadows and highlights on the rich grain. Unique 5/8" triple insulated beveled glass with brass caming sets an impressive precedent at the entry. And these elegant doors are available with matching sidelights.



**Pendleton Park** OAK-5662 Door with OAK-5763 sidelights Waterbury OAK-5872 Door with OAK-5973 sidelights Lincoln Park OAK-5660 Door with OAK-5761 sidelights



caming, triple insulated

hip-raised oak panels

For information contact: Morgan Distribution 128 McQueen Street W. Columbia, SC 29169

# SCAIA REVIEW OF ARCHITECTURE 88/89 SOUTH CAROLINA CHAPTER/THE AMERICAN INSTITUTE OF ARCHITECTS

#### SCAIA OFFICERS

1988

President JEFFREY M. ROSENBLUM, Charleston

Vice President SIDNEY W. STUBBS, Charleston

Secretary-Treasurer W. DOUGLAS CORKERN, Hilton Head

Directors E. LONZO GREENE, Greenville THOMAS J. HUND, Hilton Head DINOS C. LIOLLIO, Charleston JAMES A. NEAL, Greenville B. PAUL PUSHKAR, Columbia LARRY C. TIMBES, Myrtle Beach

1989

President SIDNEY W. STUBBS, Charleston

Vice President W. DOUGLAS CORKERN, Hilton Head

Secretary-Treasurer JAMES A. NEAL, Greenville

Directors LYNN CRAIG, Clemson MYLES GLICK, Charleston E. LONZO GREENE, Greenville THOMAS J. HUND, Hilton Head MICHAEL KEESHEN, Greenville B. PAUL PUSHKAR, Columbia

Executive Director KATHERINE W. SMITH, Columbia

Assistant Director ALLISON K. SEIGLER, Columbia

Secretary RUTH ANNE WORRELL

CHAPTER OFFICE 1522 RICHLAND STREET COLUMBIA, SC 29201

Editor MICHAEL S. KOHN

Assisting ROBERT L. CHARTIER BEAU CLOWNEY MATTHEW DAVIS RENEE DE ADAMO MICHAEL KEESHEN PAUL MCCLANAHAN JULIA FLOYD PARLER P. DOUGLAS QUACKENBUSH EDWARD ZIEGLER

#### COVER

Coastal sunset view of King's Bay Enlisted Dining Facility by Lucas, Stubbs, Pascullis, Powell, and Penny. LS3P has consistently produced a high quality of architecture over the years. This galley is evidence of the thought these award-winning architects give their projects. The facility responds to sight lines to spectacular views, accommodates local architectural styles, and even anticipates nearby future development.

More information on this project and other award-winners begins on page 19.

PERSPECTIVE



	rage J
ENERGY AWARDS	Page 6
SPARTANBURG R/UDAT by Pete McCall	Page 10
CHARLESTON BIRDHOUSE INVITATIONAL	Page 12
CLARK & MENEFEE UPDATE	Page 14
URBAN DESIGN IN COLUMBIA by B. Paul Pushkar	Page 16
HONORS AND AWARDS	Page 19
SCAIA ROSTER	Page 50

Listing of all Fellows, Corporate Members, Associate Members, and Affiliates of the South Carolina Chapter of the American Institute of Architects and the firms with which they are associated.

**OFFICIAL PUBLICATION, SOUTH CAROLINA CHAPTER AMERICAN INSTITUTE OF ARCHITECTS Review of Architecture** is published annually by the South Carolina Chapter of the American Institute of Architects. Circulation is to all members of the Chapter and to professional engineers, interior designers, contractors, planning agencies, finance institutions, and church, hospital, school and governmental officials in the State. Issues are available from the chapter office for \$2.00 per copy. Opinions expressed by contributors are not necessarily those of the South Carolina Chapter of the American Institute of Architects. Advertisements do not constitute an endorsement by the South Carolina Chapter of the American Institute of Architects. **Review of Architecture** is printed by The R. L. Bryan Company, P.O. Drawer 368, Columbia, S.C. 29202-0368. Ashley Furniture Industries Southern Furniture Market Showroom High Point, North Carolina



# LUCK STONE PORTFOLIO SERIES

When their 14,000-square-foot Showroom opened in October 1987, Ashley Furniture Industries greeted visitors with an elegant new image. Rosso Levanto marble had been selected by their designer to reflect the upgrading of their new lines.

Because of their huge inventory and fabrication capabilities, Luck Stone was able to use their resources to match 843 square feet of the colorfully veined tiles and slabs to create this dramatic entrance. At their North Carolina Showroom, expert craftsmen prepared the customcurved archway and the solid marble desk front, then worked with the installer to make sure it was perfect.

**Designer:** Joyce Design Group, Inc. **Builder:** Varner Construction Company **Installer:** Peagram Marble and Tile **Marble Supplier:** Luck Stone Corporation Luck Stone, recognized for its expertise in the importing and fabrication of marble and granite, operates ten quarries and three major Showroom Centers and Fabrication Shops in the mid-Atlantic. Offering over 135 varieties of stone and marble to architects, designers, builders, contractors and consumers.

For more information about Luck Stone's current projects and quarry representation, write Luck Stone Corporation, P.O. Box 29682, Richmond, VA 23229. Or call 804/784-3335.



Richmond, VA, 804/784-3383 or 1-800-255-LUCK • Charlottesville, VA, 804/295-9227 Sterling, VA, 703/435-1400 or 202/471-1944 • Greensboro, NC, 919/852-3600 or 1-800-247-LUCK • Knoxville, TN, 615/584-4633

### Perspective

#### SCAIA LIBRARY

The SCAIA has established a library at the Cottage for its membership. Books and videotapes can be checked out for a two-week period at a cost of \$1.00 per book plus shipping. This is a valuable resource for all AIA members. The Chapter welcomes donations and memorial gifts to the library. Several of the latest book additions are:

The Architecture of Robert Mills—John M. Bryan

Site & Sculpture: The Collaborative Design Process—Wagenknecht-Harte

The Sourcebook 2nd Edition—Kirk Hersey Post Occupancy Evaluation—Wolfgang F. E. Preiser

The growing videotape collection includes the following AIA seminars:

"Managing Projects" "School Design" "Managing Profitability" "Small Firms" "Financial Planning" "Ownership Transition"

Contact the SCAIA Cottage (803/252-6050) to check-out resource materials.

#### SELECTING AN ARCHITECT USING A QUALIFICATION BASED SELECTION PROCESS "QBS"

A Public Service provided by the South Carolina Chapter, American Institute of Architects.

When public or private officials undertake a building project, whether it involves a new building or remodeling or expanding an existing facility, the selection of an Architectural firm is one of the most important events in the process. This is because the Architect's performance can influence the entire course of the project—financial feasibility, public response, design, functional efficiency, construction costs, operating and maintenance costs during the facility's life.

The South Carolina Chapter, American Institute of Architects (SCAIA), through it's Qualification Based Selection (QBS) program, can be an invaluable resource to board members, committees and staff when your organization begins planning for a building project.

- This methodology can be used for an individual or an organization (public or private) needing to select an Architect.
- A public relations campaign will begin shortly to make the public aware that the SCAIA has information available for interested persons.
- "Facilitators," who will assist potential users of the QBS system, are set up statewide.
- The best method of making people aware of QBS is through all members of the American Institute of Architects.

• Call Section Directors or Kay Smith at the AIA Headquarters (Phone: 803-252-6050) for further information.

#### "ARCHITECTURE IN SOUTH CAROLINA"

South Carolina architecture is the subject of a slide show developed through the Public Relations Commission of the SCAIA. This show has been adapted to videotape format for use by the membership for educational and civic club programs. The project was made possible through grants from the following sponsors:

Metromont Materials Corporation Pella Window and Door Company, Inc. Piedmont Printmakers Andersen Corporation The Print Machine

For more information, contact the SCAIA Cottage (803/252-6050).



#### "ARCHITECTURE—THE SHAPING OF SPACE"

The Greenville Section of the SCAIA has produced an educational video about the built environment along with the South Carolina Educational Television Network and the Office of Instructional Technology of the SC Department of Education. "Architecture—The Shaping of Space" is a 20-minute program that follows a mime, a wizard, and three middle schoolers as they deal with their environment. The video is an excellent tool for architects and teachers for career days and study series on architecture.

The project received grants from the following:

College of Fellows Fund of the AIA

National Endowment for the Arts/South Carolina Arts Commission/Metropolitan Arts Council Greenville Council of Architects member firms

Greenville Council of Architects Auxiliary

The following sponsors also contributed:

Metromont Materials Corporation

South Carolina Chapter American Society of Landscape Architects

Carolina First Bank

Greenville Chapter, Construction Specifications Institute

Videotapes are available for purchase through the Greenville Section—Contact Ed Zeigler (803/242-0761).

#### ARCHITECTURE FOR HIGH SCHOOL STUDENTS

What should I do to prepare for a career in Architecture? As a question frequently asked of architectural practitioners, a quick, easy answer is now available: Clemson University's EXPLORATION IN ARCHITECTURE.

First offered in 1988, this summer school for pre-college students is a resident program presented by the College of Architecture. Approximately a dozen high school Senior and Junior students attend a week long intensive introduction to Architecture. The students learn about design through lectures, seminars, films, studio design, and field trips. Included in the introduction are the related fields of furniture, urban and landscape design.

This year eighteen students, about half from South Carolina, attended the EXPLORA-TION IN ARCHITECTURE. An address by Dean Barker, AIA, began the eleven day adventure. Professor Yuji Kishimoto, as the principal faculty instructor, presented several small design projects. Professor Cecilia Volker, Ph.D. acquainted the participants with a survey of design history. Professor Richard Norman introduced the capabilities of CADD grahics and systems in Architecture. Paul Cook, AIA, introduced the students to Odell Associates offices in Greenville and the Michelin headquarters building project. The Students also visited Pendleton, South Carolina, and Professor John Jacques, AIA. At his office they discussed many of his recent architectural projects. The most recent field trip was to Atlanta, Georgia. Last year they visited the office and projects of Craig, Gaulden & Davis.

The summer school costs \$730 for boarding students; costs for day students are as low as \$480. This year three full scholarships were awarded. More scholarships can be made available as additional financial support is forthcoming. Prof. Kishimoto also stated that a second level of summer school can be available if sufficient numbers of students express their interest.

More information is available upon request by contacting Prof. Kishimoto, College of Architecture, Lee Hall, Clemson University, Clemson, SC 29634-0503.



# in-gen-ious (adj) clever, resourceful, original, and inventive

Excellence in design. Outstanding energy efficiency.



The blending of those qualities is as challenging as it is desirable. Creating buildings that successfully merge the two objectives is...ingenious.

Recognizing and promoting that achievement is what the South Carolina Energy/Design Awards is all about.

Santee Cooper (South Carolina's state owned electric utility), South Carolina Electric & Gas Company, and the South Carolina Chapter of the American Institute of Architects are proud to sponsor this important program, and pleased to present the winners of the inaugural edition of the demanding competition.



SCAL



Commissioners of Public Works Administrative Offices, Charleston Lucas Stubbs Pascullis Powell & Penney, Ltd., Charleston



Residence of Mr. & Mrs. C. Don Wall, Greer Neal, Prince & Partners Inc., Greenville

# 1989 South Carolina Energy/Design Awards

# HOW SOME SOUTH CAROLINA DOCTORS FOUND A NEW WAY TO FIGHT THE COMMON COLD.

HIGH EFFICIENCY HEAT PUMP

Keeping patients from feeling too hot or too cold is an everyday concern at the new Spartanburg Surgical Clinic. And so is keeping heating and cooling costs down. So the doctors were glad to find a cure for both problems: a high efficiency heat pump used in conjunction with a programmable thermostat.

With the heat pump, plenty of warm or cool air is evenly distributed in every room. And with the thermostat, monthly demand charges are kept down since unauthorized people can't tamper with the setting. Duke Power showed the clinic's administrators how to use the thermostat to get the most comfort from the system while keeping costs to a minimum. And today, they're so pleased that they say they'd readily choose the same combination for future buildings.

Chances are we can help with your operations, too, no matter what profession, business or industry you're in. Because we constantly keep up with innovations being made with electric technology. And we pass on what we know free of charge. So call your local Duke Power office and talk with a marketing representative. Because there are probably ways you could reduce costs. And that's **DUKE POWER** healthy for anyone's business. *Generating Energy Alternatives* 

# WITH PROVEN PERFORMANCE



In Controlled Laboratory Testing.

In Actual Fires in the Field.

# **Equivalent Thickness and Fire Resistance of Typical** Solite Lightweight Aggregate Concrete Masonry Units.

"Equivalent Solid Thickness" is the average thickness of the solid material in the unit, and is used as a criteria for fire resistance. We can compute Equivalent Solid Thickness by this formula. If Ps equals percent solid volume, T equals actual width of unit, then equivalent thickness, EQ. TH. = T x Ps



FIRE RESISTANCE RATINGS BASED UPON MINIMUM EQUIVALENT THICKNESS OF CONCRETE MASONRY UNITS			
Ratings in Hours	2	3	4
Expanded Shale, Clay or Slate* (Rotary Kiln Produced)	3.6	4.4	5.1
Calcareous Sand and Gravel**	4.2	5.3	6.2
Siliceous Sand and Gravel**	4.5	5.7	6.7

\*UL618 "Standard for Safety-Concrete Masonry Units" specifies strength, mix composition and dry rodded density of lightweight aggregates-(blending of natural aggregates compromises fire ratings) Full scale fire tests in accordance with ASTM E-119

\*\*Estimated Ratings --- "Tests of the Fire Resistance and Strength of Walls of Concrete Masonry Units", Portland Cement Association 1934

#### Offices:

P.O. Box 437, Mt. Marion, NY 12456 (914) 246-9571

- P.O. Box 27211, Richmond, VA 23261 (804) 329-8135
- P.O. Box 987, Albemarle, NC 28001 (704) 474-3165

P.O. Box 297, Green Cove Springs, FL 32043 (904) 264-6121

P.O. Box 39, Brooks, KY 40109 (502) 957-2105

#### Plants:

Saugerties, NY • Leaksville Junction, VA • Bremo Bluff, VA • Aquadale, NC • Green Cove Springs, FL • Hubers, KY



Lightweight Masonry Units









Photography for Architects, Builders and Developers



# P. Crawford Photography

in South Carolina **(803) 779-3394** 





## Spartanburg R/UDAT

#### SPARTANBURG R/UDAT Brings Vision, Framework for Revitalization by Pete McCall

Last November, the American Institute of Architects sent a "swat" team of nine experts in architecture, urban design and planning, transportation, real estate, and economics to Spartanburg, SC. It was the 100th such visit of a Regional/Urban Design Assistance Team (R/UDAT), a nationwide community service program offered by the AIA since 1967. The team's proposals to revitalize the city's decaying core were greeted with a rousing reception from community residents, who gave R/UDAT a five-minute standing ovation at the well-attended public meeting where the plans were unveiled.

Within two weeks of the four-day R/UDAT visit, the city launched steps to carry out the team's recommendations for developing a long-range plan for downtown future development. The city council sent its engineering and planning staffs back to the drawing boards to rework plans for reopening the pedestrian Main Street Mall to vehicular traffic—in conformity with R/UDAT proposals. In addition, a development group proposing to build a bank office/retail development on a vacant city-owned downtown block asked the city council to delay consideration until they had time to adapt their plans with the R/UDAT report.

City and business leaders expressed enthusiasm and optimism about the team's recommendations. "It's a basis to continue our efforts," said Mayor Lewis Miller after the overflow town gathering of more than 350 citizens in November. "It gives us really fantastic ideas."

The recommendations provide a conceptual framework to restore downtown as the centerpiece of this diverse industrial and eminently livable city of 45,000, as well as to enhance the city's poor self-image.

In contrast to many small U.S. cities, Spartanburg has moved away from long-standing dependence on a single industry-textiles. In the past 25 years, the city and county attracted more international investment per capita than any American community its size-an investment of more than \$1 billion. Spartanburg County is home to the U.S. headquarters of 33 foreign-owned firms and boasts more than 50 firms from 10 nations that employ over 7,000 workers. Foreign investors are attracted to Spartanburg County's "crossroads" location-midway between New York and Miami and less than a three hours drive from Atlanta or Charlotte-as well as its "pro-business environment," according to a Peat-Marwick study. Yet the county's economic vitality and livability has not extended to the city's desolate, sleepy downtown.

"Downtown is a mess. Urban renewal and Model Cities promoted wholesale demolition, and there is no there there," observed Birmingham architect Gray Plosser, AIA, after his preliminary evaluation visit to Spartanburg last fall. "It's clear that what is lacking is a positive self-image as reflected in a sense of place at the heart of the community."

In its application for AIA assistance, Spartanburg had asked R/UDAT for a vision, a framework for future planning and development, and an image and identity unique to Spartanburg that would unite all her citizens. Specifically, the R/UDAT's charge was to:

- define an image for downtown;

- create an urban design framework for that image;
- determine a proper mix of commercial, cultural, and residential uses;
- evaluate current development plans and proposals; and
- create a focus that establishes a sense of place for the city.

Team members were asked to consider several specific topics, including the need for a central hotel, evaluation of development sites, and the viability of an east-west access on city streets. In addition, R/UDAT was asked to address how the city can encourage quality development, foster development of green space, and integrate cultural facilities.

Among its detailed plans for sprucing up downtown Spartanburg, R/UDAT called for reopening the underused pedestrian mall on Main Street to two-way auto traffice and to rebuild the central Morgan Square as a public space and focal point of downtown activity. "In many ways," according to the Spartanburg Herald-Journal, "the R/UDAT plan is a throwback to a Spartanburg of another era, and that's what is most exciting about it." For example, a redesigned Morgan Square is really an updated version of the 1880s Morgan Square; and Main Street would return to its pre-1973 status.

In its executive summary, R/UDAT observed downtown Spartanburg has struggled in recent years despite "some pockets of strength." The downtown's overall image is "weak," but with the recent ground-breaking of the new 17-story Spartan Foods building "hope has once again been kindled."

The four-day R/UDAT process included tours by bus, foot, and helicopter; formal and informal meetings with business and community leaders; a half-day public meeting, where the team heard various views and gathered a potpourri of information; and a two-day design charrette, where team members deliberated and brainstormed over ways to help the city help itself. An integral part of the process is public participation, which enables the team to learn firsthand what problems, concerns, and issues are most important to the community.

The team responded to myriad concerns voiced by residents at the Nov. 12 town meeting. Among the comments: "Don't give us another cookie-cutter city.... The climate is ready. Don't do a band-aid solution.... Downtown is a thorn in the city's side.... The soul of Spartanburg is hovering over downtown looking for a home.... We have a fourlane racetrack surrounding the skeletal remains of a once-vibrant city.... Downtown doesn't reflect the calibre of our citizens.... Black businesses are dying or gone.... Downtown is a people-hostile situation."

Following the meeting, citizens said: "You have succeeded in bringing us together.... I never realized how much I liked Spartanburg."

"The Spartanburg R/UDAT was a resounding success," said former AIA Board member and local architect James L. Thomas, FAIA, who worked with the Spartanburg Council of Architects, the Spartanburg Development Council, and community leaders in laying the groundwork for the visit. "It was R/UDAT at its best."

A special guest during the R/UDAT visit was 1988 AIA President Ted P. Pappas, FAIA, who spent two days with the team. "The 100th R/UDAT marks a significant milestone for the AIA and its commitment to community assistance," he said. "Not only does it demonstrate the longevity and success of this important public outreach effort, but it illustrates the contributions that architects can and do make in communities around the country."

In addition to Chairman Ron Straka, members of the AIA's 100th R/UDAT were:

- Brian Bash, Philadelphia, economist/real estate consultant;
- Richard A. Beatty, Newburyport, MA, transportation planning consultant;
- Jan L. Cook, Alexandria, VA, communications consultant/journalist;
- John Desmond, FAIA, Baton Rouge, LA, architect/designer and veteran of 12 previous R/UDATs;
- Charles Harper, FAIA, architect/urban designer, natural disaster recovery expert, and former mayor of Wichita Falls, TX;
- Peter M. Hasselman, FAIA, San Francisco, architect/urban designer;
- Dennis Pieprz, Boston, architect/urban designer;
- James R. Vaseff, AIA, architect for Georgia Power Company's community development office and chairman of the AIA Regional & Urban Design Committee, sponsors of the 21-year-old R/UDAT program.

Assisting the team were eight architecture students from nearby Clemson University School of Architecture, who are scheduled to continue work on Spartanburg's downtown as part of their studies.

Since 1967, the AIA public outreach program has fielded 100 teams of out-of-town volunteers to assist communities ranging in size from Spooner, WI, to Detroit. (The Spartanburg R/UDAT was the first visit to South Carolina.) Team and local professional services valued in excess of \$3.5 million have been donated to communities through R/UDAT. For more information on R/UDAT, contact Bruce Kriviskey, AIA, at (202) 626-7452.

(Pete McCall, editor of the AIA MEMO, accompanied the Spartanburg R/UDAT, along with Marjorie Valin, director of AIA public communications, who is producing a video documentary of the AIA's 100th R/UDAT.)

# Spartanburg R/UDAT



Pete McCall, editor of the AIA MEMO



Main Street Mall, Downtown Spartanburg



Morgan Square Proposal



AIA's 100th R/UDAT Team



Main Street Proposal





Bill Zehrung, Clemson University Architectural Student

## **Charleston Birdhouse Invitational**

# **CHARLESTON BIRDHOUSE** INVITATIONAL

These works are the results of the Charleston Birdhouse Invitational, an exhibition sponsored by the Gibbes Art Gallery, Charleston, S. C. The exhibition focused on the innovative designs of South Carolina architects through the medium of the birdhouse. A subsequent auction benefitted the Gibbes Art Gallery and the Roper Hospital Cancer Center.



BIRDHOUSE FOR PURPLE MARTINS mahogany, copper, painted plywood David John Allison, AIA  $24^{\prime\prime} \times 24^{\prime\prime} \times 30^{\prime\prime}$ 



AVIBUS wood/aluminum Keith Edens, intern arch. 8" × 8" × 16"



WOODSTOCK AT SAN GIMIGNANO steel **Robert Epps**, Architects 111/2" × 111/2" × 29"





PURPLE MARTIN HOUSE

O. Douglas Boyce, Jr., AIA

cypress

BIRDOMINIUM poplar and mahogany Chris Schmitt, AIA 30" × 30"



MOBILE BIRD HOME plywood and painted cedar Robert Silance, RA  $12'' \times 12'' \times 55''$ 



HOUSE FOR FLYING FISH colored plexiglass, poplar wood plywood Lynn Craig, AIA, RIBA, APA 6" × 6" × 30"



JUST ARROGANT, JUST SHABBY partially painted, partially unpainted wood David Graham, AIA, Eddie Carter, AIA, Felix Ayres, AIA  $23^{\prime\prime} imes 28^{\prime\prime}$ 



CRESCENT steel and terra cotta David Richards  $1' \times 1' \times 5'$ 



BIRDHAUS glass block, hardware cloth, wood Gary Crafts, AIA 5" × 8" × 8"



A FLEDGLING'S REFUGE wood and copper Tynes Associates, Inc.  $16\frac{1}{2}^{\prime\prime} \times 6\frac{1}{2}^{\prime\prime} \times 60^{\prime\prime}$ 



GOTHIC HOUSE FOR PURPLE MARTINS painted pine and patinated copper Randolph Martz, Architect  $25'' \times 25'' \times 71''$ 



WREN-WICK HOUSE mahogany and paint Samuel S. Logan, AIA 6" × 11<sup>1</sup>/<sub>2</sub>" × 11<sup>1</sup>/<sub>2</sub>"



SUSPENDED HABITAT painted wood construction Alex Busto Alan Kinter  $30'' \times 26'' \times 26''$ 

# **Charleston Birdhouse Invitational**



BIRD HOUSE/BIRD BATH steel and copper Ray Huff, PA  $30'' \times 20''$ 



GOLDFINCH VILLA painted fir Bob Bazemore  $10^{1/2''} \times 10^{1/2''} \times 20''$ 



HOME TWEET HOME mahogany and cypress John Jeffers

## **Clark & Menefee Update**



As a national AIA Honor Award winner in 1987, Clark & Menefee Architects, Charleston, is continuously producing work of interest. At left is the firm's proposal for the Charleston Bus Stops, a prototype in steel painted "Charleston Green" with various configurations. Below left is the firm's award-winning entry in the Marine Science Competition, a solution which combines canals, bridges, and fountains with the requirements of aquatic display. Directly below is the Reid House. Presently featured as an Architectural Record House, this modest structure takes on the grandeur of a "tower" in its bucolic setting.







Technical Literature and Presentations, Design Assistance, and Detail Review Call 1-800-868-7222

**BRICK ASSOCIATION OF SOUTH CAROLINA** 



625 Taylor St. Columbia, South Carolina 29201

ASSOCIATION MEMBERS: Ashe Brick Division, Van Wyck: Boren Clay Products, Blacksburg; Carolina Ceramics, Inc., Columbia; Guignard Brick, Lexington; Palmetto Brick Company, Cheraw; Richtex Corporation, Columbia; Salisbury Brick Corporation, Summerville; Southern Brick Company, Ninety Six; Waccamaw Clay Products, Myrtle Beach.

#### by B. Paul Pushkar, AIA

(This article is composed of historical observations and personal opinions in the form of editorial comment, and does not necessarily reflect the opinion of the SCAIA.)

Columbia, the capital city, located near the geographic center of the state, which has neither the historically intact ambience of Charleston nor the natural mountain proximity of the Greenville-Spartanburg area, has nevertheless an asset which has contributed to its growth, and could make it a memorable city. Planned urban design has been linked with Columbia since its inception, and has much to do with the contemporary character of the capital.

An act of the General Assembly in 1786 established Columbia as the new capital of the state, to be built on the bluffs overlooking the confluence of the Saluda and Broad Rivers, forming the Congaree. Lying on the fall line (the first incidence of rapids and falls impeding upriver travel), the plantation of Colonel Thomas Taylor named Plains was chosen because of its siting on a broad plateau overlooking a gentle rise from the river. Thus, the city became one of the first planned cities of our new nation.

Although not as grandiose as Washington, D.C., and lacking the garden charm of Savannah's squares, the elemental and functional four square mile grid was laid out to form the town, with its boundaries still identifiable (Congaree River/west; Elmwood Avenue/ north: Harden Street/east; and Whaley Street/ south). Bisecting this square were two major streets named in honor of the two houses of the legislature which were the town's raison d'etre. Assembly Street (for the General Assembly or House) and Senate Street for the upper chamber. These two potentially magnificent boulevards, 150 feet wide, with their divided lanes and tree planted medians, never became the predominate thoroughfares. Usurped by Gervais as the east-west axis and Richardson Street (renamed and henceforth referred to as Main Street) as the north-south, one could surmise that Assembly and Senate, and the initial plan, lacked from not having a central focus. The original State House designed by James Hoban and burned during the Civil War, sat on the block bounded by Main, Assembly, Senate, and Gervais, facing the river off-center from the junction of the original axes. Therefore, an actual central focus was not developed in the initial planning.

An important impact of the early planning decisions was the foresight of the General Assembly and the town planners to deed several blocks within the city to the major religious denominations prevalent at the time, and to educational entities. The somewhat arbitrary nature of the location of these grants unknowingly affected the patterns of growth, for residential uses seemed most compatible with churches and schools as neighbors. The foundation of the University of South Carolina in 1801 and the subsequent land use of the early college established a pleasant ambiance still

identifiable as the Horseshoe and the attractive residential neighborhoods surrounding.

The grid pattern, of advantage when dividing the city into marketable lots, has obvious limitations when applied over a topographically uneven terrain. The logic of the grid is even today thwarted by the legacy of Columbia's unpredictably hilly landscape; streets such as Washington, Lady, Henderson and Blanding disappear and reappear due to steep grade changes. The grid also ran aground in areas paralleling the river; the nature of the Congaree disposed to periodic flooding hampered development along the city's western edge. The perception of the river as an unfriendly boundary has continued to the present, and this thinking has only begun to turn around in the past decade.

Research shows no direct evidence why Main (Richardson) Street developed as the main commercial thoroughfare, although the location of the first Richland County Courthouse, circa 1808, on Main Street either confirmed an existing tradition or began to solidify one which was forming. Main Street lies on a more level path than Assembly, which could also explain its preferential treatment as the business center. But the tradition was established early, as written accounts of the first decades of the 1800's describe Assembly as nearly impassable, choked with weeds. Gervais Street likely developed rather than Senate Street due to alignment with river crossings and later bridges spanning the Congaree.

Once the original grid was laid out and certain parcels were dedicated to governmental or institutional use, the planning decisions which shaped Columbia were perhaps not the result of a conscious plan, but were more akin to vernacular decisions based on function, aesthetics, and economics. Early residents were perhaps more sensitive to good design, for even without the guidance of professional planning, Columbia was noted in many accounts as a pleasant city, with its wide streets, handsome trees, and notable residential architecture.

Due to its development as a totally new town, the major landmarks were the early constructed public buildings, which addressed the street fronts, used towers to create a rudimentary skyline, and generally contained handsome detailing and materials to denote their importance. For example, the new State House, from designs begun in the 1850's, was described by contemporary accounts to be one of the finest pieces of architecture in the South. The siting of the new State House straddling Main Street gave focus to the grid and the major thoroughfares. Its siting could have been affected by the existence of the first State House, in use during the construction of the second.

The higher ground of the original city was used primarily for residential and commercial uses; the half of the city between Main Street and the river developing as service for the agricultural trades. Proximity to the river, the completion of the Columbia Canal in 1828, and the arrival of the railroads in 1842, marked this area as the industrial-warehouse district, a dubious distinction still present. Citizens for nearly two centuries viewed the river as a transportation and drinking water source and as a source of destructive flooding; the more popular high ground, with its "magnificent eminence" and views to the surrounding countryside, was the preferred district. This resulted in zoning by default; no legislation of this land use was necessary, for the pieces simply fell into place.

The burning of Columbia on February 17, 1865, causing nearly total destruction of the commercial and industrial quarters and much damage to the residential areas, could have given impetus to a new planning movement. The wartime destruction had wiped the slate clean. However, unless massive redevelopment occurs, cities will build back with the same streets and lots intact; the continuity of ownership of lots and street patterns often gives a sense of security and order to a dazed populace. The planning decisions which had led Columbia's growth for eight decades seemed adequate to continue. The population, suffering from poverty and shock, were not likely to institute major changes.

The twentieth century ushered in a continuation of the initial planning trends; but suburban areas began to be developed with the introduction of streetcar lines. (Surprisingly, early mass transit was better developed and better utilized than today's system.) Early advertisements extolled the pleasures of living in College Park (adjacent to Columbia College) and Shandon. Americans as a whole seemed more disposed to move away from the central city; this trend remains as one of Columbia's plagues, encouraging the perception of the city as valuable during the daytime weekdays only.

Planned growth became a byword for the 1960's, and this era marked the beginning of modern planning for Columbia. The city in a much publicized effort hired planner Constantine Doxiadis for an ambitious study. Although elements of this plan were perhaps out of scale for Columbia's growth and were subsequently abandoned or modified (the Columbia Area Transportation Survey, or COATS for example), many elements of the plan were right on the mark and have seen some levels of implementation. This study advocated the development and reinforcement of governmental nodes to provide Main Street with a polarity; state government complex anchored by the State House and the City-County and Federal node, outlined initially by the Federal Courthouse on Laurel Street and City Hall, and recently strengthened by the Strom Thurmond Federal Complex and Richland Judicial Center. The COATS plan included a transportation hub in the downtown area for the interface between different systems of transportation. Perhaps the most significant aspect of the study was the identification of the river's neglect, and the suggestion of railroad relocation and consolidation to affect more developable land adjacent to the river.

A 1980's study by Robert Marvin & Associates detailed specific means for strengthening the image and effectiveness of this area, named the Congaree Vista. Their suggestions for specific-use corridors running to the river, the targeting of mixed-use development and the necessity to attract residential uses and nighttime activities, and an urban greenway from the city's highest terrain near Sidney Park to the new State Musuem, all offer sound planning principles to an enthused and committed government and populace. Columbians are realizing that the undeveloped land in the Vista is a mother lode waiting to be mined. Many of the assets which made Columbia one of America's more attractive cities before Sherman's visit still exist to be built upon.

While overall planning concepts are providing the framework for growth into the next century, individual elements which fit into this framework can have a major impact on the image, growth, and overall character of the city. Specific works of architecture, viewed within the context of the total urban environment, may be attractive, functional, economic solutions well-liked by the owners, but may also be miserable statements regarding urban design. The individual works are rarely legislated or policed by design commissions (exceptions being within Historic Districts,) therefore the project's ability to have a positive impact on the city as a whole rests solely with the conscience of the owners, developers, and architects. Several recent projects, perhaps for reasons uncontrolled by the client or the architect, are nevertheless failures in enhancing the urban character of Columbia.

A significant trend of the 1980's and perhaps the most saddening and irreversible is the "Houstonization" of Columbia. Houston, Texas, has often been singled out as containing the elements which make cities unpleasant places in which to live. Houston, which had little history or attractive precedent upon which to build, experienced a surge of growth during the oil boom years where the downtown quickly became an expanse of pavement, with monstrous towers struggling to outdo each other in size and gimmick. To support these office towers, nearly all low rise buildings were demolished, giving way to the surface parking lot. The resulting urban character is anti-people; automobile traffic is too clogged to be viable, and buildings are seen as hermetic envelopes, self-contained, isolated, and uninviting. The city is overly crowded during the day and a ghost town at night.

In the past decade, Columbia has been raped by developers in this manner of "Houstonization." Assembly Street, with memories of the curb market and the sometimes-seedy stores, was nevertheless an active, vital street which benefitted from a scale and function which encouraged pedestrian activity.

This former Assembly Street has ceased to exist. Only a few pockets of retail activity survive, and entire blocks have been decimated by the bulldozer. From the standpoint of urban design, creating office buildings surrounded by (top) Entire frontages of Assembly Street have been decimated to create parking lots.

(below) An uninviting Main Street streetscape





pavement up to the door delivers a sad commentary on the economic forces of dollar versus design. It seems that, in Columbia of the 1980's, the dollar will nearly always win. The C&S Plaza, completed in 1989, is a minor exception. This complex on Main and Richland Streets, with its base of clearly office usage, is welcoming in contrast to its counterparts, and the adjacent garage, well integrated into the design, allowed some welcome green space.

Several office buildings (one hestitates to call them towers; as a group, Columbia's highrise community consists mainly of squatty or disproportionate boxes) further down Main Street have also not strengthened the urbanity of Columbia's heart. Earlier examples of integrating retail or activity amenities at the street level have given way to severe, uninviting facades, which seem to state, "Enter only if you have business here." The Standard Federal building at the corner of Main and Washington streets was an early attempt to allow streetside amenities. Unfortunately, the once noble, open loggia with its dramatic fountain has been closed in. Palmetto Center, the development which was heralded to spur the redevelopment of the downtown area, was conceived with a base of retail space. The realization of this has not been successful, for much of the space remains empty.

The IBM Building (Main Street between Washington and Lady) has ground floor space which relates to the street, but the usages are business-oriented and not conducive to shopping or browsing. Yet the First National Building (corner of Main and Washington) and the First Union Building (corner of Main and Hampton) are the most anti-urban in their conceit. Lobbies are hidden behind reflective glass or a dark arcade, and provide architectural facades which cause one to quicken his or her pace to escape these brooding, barren monoliths.

Capitol Center (known colloquially as the AT&T building) is also guilty of creating the insular, sealed space with uninviting walls of glass facing Gervais and Assembly streets. (Were it not for a polished metal canopy thrusting out like a tongue indicating the entry,

## Urban Design in Columbia



(above) The Assembly Street base of Capitol Center, barren and unfriendly





(above) One of Columbia's most important corners, Main at Gervais, graced with a parking lot.

(left) Koger Center, a cultural asset in function, nevertheless neglects its relationship with the city.

one might circle the building endlessly in search of a way in.) But this complex is frustrated by a more serious anti-urbanism. The corner of Main and Gervais has traditionally been one of the most important corners in Columbia, with two earlier City Halls holding the street facades on both streets, and sitting solidly on the corner with monumental towers and mass. Their replacement by the Wade Hampton Hotel in the 1950's gave a less interesting building, but maintained the corner framing the State House. However, Capitol Center is incredibly egotistical, stepping back from Main Street and shouting for attention, leaving the corner for a mediocre park and a parking lot! Main Street, once interesting and vital, is being harmed by projects which have no commitment to making a building work within and strengthen an urban context. Though Main Street's decay is a problem which has roots in areas other than architecture, it appears that developers and architects are not particularly concerned with the problems they reinforce.

An older project at the other end of Main Street, the Richland Judicial Center, could be faulted by creating a vast, empty plaza which violently pulls one's attention away from the streetscape. At least this project had a reason for its angular plaza; the angle points to the city and federal government components which comprise the governmental node. Here was a building which, in its basic planning, consciously reinforced an earlier planning tenet. Another recent project, the Koger Center for the Arts (Assembly at Green Street), makes an attempt at an appropriate monumental statement, but remains flawed from the context of urban design. Although an appropriately designed staircase paralleling Green Street adds some drama, the true "front" of the building facing Assembly is a boxy facade with no clue as to where the entrance is. Another empty plaza, more akin to a field, and a parking lot provide vistas to the building. The building does not address the city in any important way; it sits arbitrarily placed in the city grid and appears to be lost.

Thankfully, the city government is exerting a positive force where it is able. Through the development of the Riverfront Park, Vietnam Veterans Memorial Park (Hampton and Gadsden), and the exciting plans for Sidney Park, the city is recognizing that the downtown can be strengthened by proper expenditure of the taxpayers' money. This expenditure, by boosting the vitality and image of Columbia, should have positive payback in terms of future development. The connection of Sidney Park via a greenway to the State Museum complex would provide an important spine for the rather formless "Vista." Further, the ambitious scope of fountains and planting for Sidney Park says, "We are proud of our city, and build boldly in demonstration of that fact."

Good urban design has also come from another institution, the University of South Carolina. The location of such a large physical plant within the city produces a myriad of problems, but the University appears to have done many things right. One of Columbia's finest outdoor spaces, the Horseshoe, is a showpiece for the city and is maintained and protected well by USC. The University has also created pedestrian malls which are effective and attractive. The buildings along these malls relate to pedestrians and create pockets of courtyards, fountains, arcades, and passive spaces. However, for all the good of USC's thoughtful design, it must be chastised for the destruction of portions of the neighborhood fabric through its perpetration of the surface parking lot.

Columbia's future atmosphere and ambiance is a direct result of how we choose to treat our environment. While the framework for improvements may be set up by historic commissions, zoning boards, planning commissions, and even the economic marketplace, we must all take some personal responsibility in our city's fate. The general public, and the architectural community specifically, must become united for good design, to discourage insensitive projects. We can learn from poor designs as well as good, and our past, both immediate and historic, provides some very clear examples of ways to create success and failure in the uban life of a city.

Paul Pushkar practices in Columbia with Design Collaborative.

The best of the best, this section of the *Review* features those projects selected for Honor and Merit Awards in 1988 by an outside jury of architectural experts. These projects go beyond simply "working" to a level of completeness, thoroughness, and ability to move one's spirit that deserves recognition. Each project reflects not only the designer's abilities, but also on the Owner's acuity and the builder's craftsmanship.

ann

1:111111

1 211

24.94.

1111111111111

The manufacture of the second se

mil in in

#### TRI-COUNTY TECHNICAL COLLEGE LABORATORY/CLASSROOM FACILITY F.J. CLARK INC.

Located on the hilltop campus of a technical college, the building is sited along the major axis of the school, the pedestrian mall. The steepness of the site allowed the Laboratories to be built at a lower level than the mall, thus preserving the unobstructed and spectacular view of the nearby Appalachian Mountains. To the immediate north, the Laboratories share an access road with the adjacent industrial arts building.

The building was required to provide a full complement of laboratory, instructional, storage, and mechanical spaces. Stepping diagonally down a steep slope, vehicle access is provided at each of the three modules on the lower level, while pedestrian access is handled on the uphill side through a series of terraced courts and protected stairways. Exposed trusses help to define each court, and serve as gateways to each entrance.

Indirect light is admitted into the lab areas through the saw tooth roof system which complemented the stepped descent of the modules, and reflects the industrial nature of the activities within.

The facility's primary construction system is concrete foundations with brick veneer masonry walls at all lower levels. Steel beams and trusses form the structure; steel stud walls, clad both on the interior and exterior by brown and clear anodized aluminum, comprise the main subsystem. Both brick and the aluminum are used throughout the campus.

Although located on a steep site, and possessed itself of multiple levels, the building is completely handicapped accessible via a system of on-site ramps and an elevator in the central module.

The view over surrounding woodlands to the Appalachian Mountains is perhaps the campus' best feature. The building's sharp geometric forms sit low along the slope of the site acting as a counterpoint to, yet maintaining this amenity. The design also provides a series of semi-enclosed courts with a repeating openand-covered transition process. Thus the facility enhances the possibilities for social interaction, and engages the user on a conscious level.









#### RECEPTEE BARRACKS WITH DINING FACILITY LUCAS, STUBBS, PASCULLIS, POWELL & PENNY

The Receptee Barracks with Dining Facility was designed as an integral part of the Fort Benning Receptee Center to provide for the billeting and dining requirements of enlisted military trainees during their three day processing cycle at the neighboring Reception Station. This complex includes Barracks, three Company Headquarters and one Headquarters unit, 22 Cadre units and an Enlisted Personnel Dining Facility. Situated on a rolling site the new three story facility can accommodate 660 male receptees, 35 "holdover men," and seat 216 persons in the dining facility.

The complex is composed of three functional units organized along a circulation axis which provides a covered space for formations and gives a clear organization to the entire complex. This diagonal organization of elements, while being aesthetically pleasing and minimizing uphill earth removal, provides an additional story below the northeast barracks wing giving space to locate the "holdover" bay and supply area.

The Bachelor Enlisted Quarters/Headquarters (BEQ/HQ) area located at the southerly end of the axis is composed of two buildings: The two story BEQ Housing wing and the two story Headquarters building located directly across the concourse.

At the northerly end of the axis is the Dining Facility which is a one story facility featuring a glass wall overlooking a natural forest setting. The building is comprised of three areas: a dining section, warewash and public toilet area and the serving/kitchen area.

The covered formation/concourse area is the principal coordinating element of the design providing the new trainee with an orderly orientation of his activities outside the Reception Station.

Materials and finishes complement existing facilities with exteriors of brick and concrete. Interior spaces are brightened through natural lighting and the use of colors, with emphasis placed on the selection of highly durable hardware and finishes.

In addition to wall and roof insulation meeting D.O.D. requirements, reflective and insulating glazing is used in exterior wall openings to reduce solar gain. The exposed concrete floor, wall and roof construction, lightly sand blasted, provides a strong, unifying design element.

It is the purpose of the entire center to provide a clear, organized introduction to army life and the Receptee Barracks with Dining Facility has been designed to do just that.



SITE PLAN TEE BARRACKS WITH DINING FACULTY FORT BENNING, GEORGIA









#### ST. FRANCIS OF ASSISSI EPISCOPAL CHURCH ARCHITECTS BOUDREAUX HULTSRAND & CARTER

Set in the midst of a heavily wooded rural site, this project consists of a church and fellowship hall for a congregation of 200 people. The 7,000 square foot facility, designed within the constraints of a tight budget, represents the first phase of a master plan which anticipates additional educational space and site development. The initial buildings, which maximize multi-use space for educational activities, are specifically designed for expansion to meet long-term growth projections.

In accordance with the church liturgy, the worship area is organized around a strong processional axis. This axis is designated by a pilgrimage as it leads to the altar and culminates in the unseen cemetery beyond (planned for the future). The axis also expresses the dialectical relationship between the church and the world: as the worshipper enters the church, the axis creates a singular narrow focus on the things of God (the altar and a view of nature beyond); as the worshipper turns to leave the church, the axis opens up to a broad view of the world and its people. The place ment of glass which allows for the dichotomous expression also provides a generous infusion of natural light which seems to belie the solidity of the exterior shell. Augmenting the soft light of the north-facing glass, the east-west clerestory windows admit direct beams of sunlight which move across the walls with the passing of time and seasons.

The deck area between the two buildings, designed as an inverse of the nave, forms a space for outside worship services and social activities. Complementing the parallel axis of the nave, the deck will provide future pedestrian access across the creek to the cemetery. In addition, while the deck is opposite in plan to the nave it has the identical dialectical relationship as one moves into or out of the space.

The exterior massing and materials of the buildings are designed to blend into the natural wooded setting. In addition the design recalls a morphology of the rural vernacular as well as allusions to historical ecclesiastical architecture.









#### KING'S BAY ENLISTED DINING FACILITY LUCAS, STUBBS, PASCULLIS, POWELL AND PENNY

Located at the Navy's major new Trident submarine base at King's Bay, Georgia, this 22,500 square foot galley responds to the established "Coastal Georgian" architectural theme. The architectural "style" of the building harmonizes and complements its existing and proposed neighbors also providing a unique focal point for dining and relaxation. This 400 seat dining facility was designed to serve the Unaccompanied Enlisted Personnel Housing (UEPH) residents and other authorized service personnel.

By having the owners and users as part of the design team, fully informed and involved throughout the process, specific needs and desires were clearly understood and addressed at the outset, resulting in a design which remained virtually unchanged in subsequent phases of the project.

The building is placed to take advantage of sight lines related to projected neighborhood housing facilities, solar orientation and views of the surrounding retention ponds. The siting also accommodates the natural pedestrian flow of the pathway systems on the base. A pedestrian bridge, connecting the housing with the Dining Facility, crosses the pond, leading the pedestrian into the promenade, directing him to the entrance or into the outdoor eating area overlooking the pond.

The building is separated into three basic zones: dining, serving, and food preparation with each of the zones designed to conserve energy using as many techniques as possible and complying with applicable standards. The building has been oriented in such a way as to minimize solar exposure.

The dining area utilizes north-flacing clerestories and large glazed openings to provide even natural lighting throughout the day, thus minimizing artificial lighting requirements in addition to offering a pleasant view of the pond. Glass areas employ insulating glass in a thermal break frame system. Bronze tinted insulating glass and interior vertical blinds provide suitable solar screening.

The serving area, which bisects the building, allows an unimpeded flow from the entry lobby through both regular and "fast-food" serving lines to the dining space. To the south, the food preparation area features solid walls to minimize solar exposure.

Brick is a material used extensively throughout the base. The brick selected for the exterior is reflective of neighboring buildings of the complex, as are the abstracted Georgian arches which are also design element linking the dining facility to the surrounding environment. Extensive use of solid oak in the lobby as builtin furniture and wallcovering creates a warm, inviting atmosphere. Quarry, ceramic tile and stainless steel complement the building's design, while providing ease in short and long term maintenance.













#### RICHLAND SCHOOL DISTRICT TWO ADMINISTRATION BUILDING ARCHITECTS BOUDREAUX HULTSTRAND AND CARTER

This growing school district desperately required additional space for administrative personnel, but didn't want to spend excessive funds on a totally new building. Therefore, it was decided that an addition to their existing 8,000 square foot administrative building was the logical choice. However, the character of the existing building, built in the early 1960's was understated at best and didn't project the forward-looking, progressive attitudes of the District. By wrapping around the front and sides of the old building, the new 17,000 square foot addition resolved both the functional and the image needs of the school district.

Addressing key functional needs, the front of the addition, attached directly to the face of the old building, provides a greater depth of office space that allows for suite arrangements not feasible in the original layout. The east and west sides of the addition form two new wings that hide the rear wing of the old building while creating identifiable territories for each of the main departments housed in the facility. Renovation work throughout the old building's interiors provides a sense of continuity between the old and new office areas. <image>

SITE PLAN







#### MCENTIRE FIRE STATION GREENE & ASSOCIATES

Intended to replace the small, outmoded, 40 year old facility currently in use, the design of this Base Fire Station responds to its programmatic goals: by providing a site integrated building to meet the growing demands for housing and dispatching fire protection teams; by taking advantage of multiple energy conservation techniques to assist in conditioning this low occupancy space; and developing a dramatic, identifiable entry to the operational area of an Air Base in the South Carolina Midlands.

The predetermined site for this facility is consistent with the Base Comprehensive Master Plan, providing a significant, central location on a pre-existing aircraft apron accessible to both the flightline and the major base thoroughfare. Access from the 5-bay apparatus room is thus provided in two directions, allowing aircraft teams to respond to flightline emergencies, while permitting structural fire teams to access the remainder of the Base. The building is oriented perpendicular to the north-south solar axis, creating an angular relationship to the road. This angle is reinforced visually through the placement of a major earth berm along the west facade of the living quarters, which also serves as the predominant solar shield from late afternoon summer sun. The result is an implied "wedge" which eases onlookers past the fire station and into the Base. Ending this major design element is a pair of inward-facing vertical brick pylons, which not only terminate the "wedge," but form a noticeable gateway for the entire Base.

The three-part geometric progression of the living quarters area affords balanced opportunity for daylighting and reflects the three major use areas provided to support fire protection teams: namely, control/office, dining/ cooking, and classroom/support. This functional distribution is further reinforced in the zoning of mechanical systems, and results in three well defined entry points which are approached through the series of grassy knolls.

Although possessing a striking presence upon arrival to the Base, the design integrates ground elements and reserved proportions in an understanded manner acknowledging the Headquarters building farther South. The emphasis is directed from the necessarily large rectangular apparatus room downward along the earth berm to the pylons. In contrast, the living quarters is a secondary element, and enjoys a separate, slightly secluded identity.

The exterior envelope is fashioned from engineered brick masonry using conventional structural steel components on load-bearing concrete masonry units. Red wirecut, the brick shade selected, has been utilized extensively throughout the Base, ensuring the compatibility of this project with its forerunners.





#### RENOVATIONS TO USC CAROLINIANA LIBRARY DRAFTS & JUMPER/ARCHITECTS, P.A.

Unique among the award recipients, Drafts & Jumper's Renovations to the Caroliniana Library at the University of South Carolina is not only a renovation effort, but is also entirely an interior architecture project.

Faced with some deteriorating plaster moldings and an existing uniformly bland white and pale lime color scheme, the architects were requested to apply a new color scheme and to provide lockable bookcases for the library's rare collection of historical S. C. books.

Drafts & Jumper began the design process with research into the building's past. The original Caroliniana Library, completed in May, 1840, is probably the oldest freestanding college library in America, pre-dating both Harvard and Yale. Built from plans sent from Washington by S. C. native son Robert Mills, the library is unabashedly cribbed from Bullfinch's Congressional Library.

Inside the building and the focus of the architects' primary investigation, Drafts & Jumper discovered two key items: that bust shelves on the pilasters were part of the original construction and that the original interior colors were uniformly white.

Drafts & Jumper also did a spatial or conceptual analysis of Mills' (Bullfinch's) design in an effort to understand what the spirit and nature of the design was. This conceptual investigation yielded an understanding of the main reading room as a large open light space flanked by a series of intimate well-articulated reading bays.

The architects judged the concept to be much more potent and important than the original colors and selected a rich palette of colors and floor patterns that reinforced the concept rather than slavishly following historical documentation.

The large open area was treated with light colors relieved with shades of warm grey and minute touches of an accent earthy red which brings out the magnificent architectural detail. The flanking side rooms were treated with a preponderance of the red, a richly patterned floor carpet, indirect light and other devices to contrast with the grandeur of the central space.

The large photo at right gives an overall view. At far upper right, the architectural details of replaced bust shelves and new glassenclosed bookcases illustrate the integration of new work within the existing building. The photo far right/middle illustrates the restored entry sequence, and the diagrams below the entry photo illustrate Drafts & Jumper's interpretation of the original concept and its built form in a longitudinal section through the space.

The jury commented that "the architect has done all the right things to bring the space back to vitality.... Use of light and color were the two primary tools, both used effectively... a very elegant building."













#### COLUMBIA BIBLE COLLEGE PRAYER CHAPEL ARCHITECTS BOUDREAUX HULSTRAND AND CARTER

Sited in a small clearing at the edge of the forest, this unique structure provides a secluded retreat for prayer near the existing chapel of Columbia Bible College. The ground floor of the building houses a room for group prayer activities; solidly enclosed from the front public side, the room opens out to views of the forest of the private back side. Exterior stairs wrap around the sides of the twin towers, leading up to the second level which contains one private prayer room in each tower. Measuring eight feet square, each prayer room contains simply a chair and desk with a lamp, basic provisions to allow for individual meditation and prayer. Beyond meeting the basic needs on the floor level, these prayer rooms also take on the character of small chapels. Glass block openings provide pinpoints of light that lead the eye upwards to the round stained glass windows high above the floor level. The stained glass allows a stream of light to wash the walls in a pattern of color that constantly changes with the movement of the sun. This use of natural light, filtered down from above, embodies the space with a meditative quality of sanctity that transcends the simple provisions of the rooms.

The concept for twin towers derives from the founding buildings of the original campus, no longer extant, and finds its expression in materials and colors that relate to the brick and stone buildings presently comprising the campus. Three colors of brick layered horizontally and vertically, develop an ambiguous scale to the small building giving it a sense of monumentality that has juxtaposed against it an intricate, almost dollhouse-like scale. The multi-light entrance doors further obfuscate the building's scale, having the appearance of massive size that belies the actual two foot width of each diminutive door leaf. The glass block "windows," inlaid ceramic tile accents, and weathering copper roof complete the ensemble of materials that enrich the character of the building.












#### 29 EAST BATTERY RENOVATION ROSENBLUM & ASSOCIATES

The Porcher-Simonds House, the original name of 29 East Battery, was built about 1856 and was of an Italianate style building, two stories on a high basement. Francis James Porcher was a cotton broker and a delegate to the South Carolina Secession Convention in 1860.

Simonds remodeled the house in the Italian Renaissance Revival style popular in the 1890's, adding the two front piazzas, one square, really being of the Greek Revival style, and the curved piazza being in the Italian Renaissance style.

The interior of the house was remodeled at the same time with an abundance of elaborate oak and mahogany finished woodwork with two baronial staircases, one leading to the main floor and one now included in the new library on the main floor.

The home was purchased in 1983 by Morton Needle, a Charleston developer, realtor, and contractor. When acquired, the home was vacant, in a terrible state of disrepair. Previous landlord-owner had sloppily subdivided this once grandiose home into apartments. Mr. Needle set out to restore it to its previous grandeur.

The new owner realized that the total square footage and cost of renovation would be prohibitive for one person to achieve. Furthermore, with changing lifestyles, this building presented a unique opportunity to provide elegant, urban living styles to several individuals who no longer needed large, suburban houses due to changes in family structure and lifestyles. It is for these reasons that the owner decided to make three condominiums out of the property, dividing the building by floors.

Numerous design problems and challenges were encountered in restoring this home into condos. An elevator and rear entry stairway were constructed to service all the floors, while the front entry serviced the second floor only (the owner's floor). The roof was developed into a rooftop pool and terrace area to be used as common space for all the condominiums. This roof area was constructed so that it was not visible from the street, yet it affords one of the best views in all of Charleston.

In order to make this project feasible, there were many structural repairs necessary. New plumbing and electrical were needed, as well as a totally new air conditioning and heating system. Furthermore, the Building Code requires fire separation between each condominium. The original side porches were restored and reused as kitchen and breakfast areas.











#### COMMISSIONERS OF PUBLIC WORKS LUCAS, STUBBS, PASCULLIS, POWELL & PENNY

As Howard Roark sat in the dean's office just prior to being dismissed from school, he bitterly criticized the parthenon and said "Your Greeks took marble and they made copies of their wooden structures out of it, because others had done it that way. Then your masters of the Renaissance came along and made copies in plaster of copies in marble of copies of wood. Now here we are, making copies in steel and concrete of copies in plaster of copies in marble of copies in wood. Why?"

This project would have, no doubt, raised Mr. Roark's ire and in fact is a building for the "Fountainhead" of Charleston, South Carolina-the waterworks building. The new administrative office building for the Commissioners of Public Works bespeaks both of historic Charleston and modern America. This 70,000 square foot building was designed to fit into a historic residential neighborhood which is now in transition. Many of the Charleston single houses which once graced surrounding streets are gone; some remain with an uncertain future. The design honors its once and present neighbors in a way that promises continuity regardless of their fate by reflecting the elements of traditional Charleston architecture while functioning as a contemporary and efficient office building.

The desire to produce the imagery of clapboard-sided residences led to the creation of an intricately detailed white Portland Cement Precast concrete building. The abstraction of wood details in white pre-cast concrete (a technique similar to the abstraction of primitive wood details into stone of Classical Greek and Roman architecture) along with the delineation of white storefront into porch-like handrails and pickets strengthen the abstraction of Charleston Single Houses. The Philosophical approach to creating wood details in precast concrete led to the development of historically evolved wood and reed details being cut into stone and becoming essential elements of the new material.

In keeping with the high technology design of the building, the interiors have a contemporary feel, and it has been noted by management that within one month of moving into the building, employees' appearance, morale and productivity were improved significantly. These improvements were attributed to the attractive, professional environment of the new office.

As the first large, public building on a street which has been designated an entry corridor to the city, this structure bears a responsibility to introduce, to signify, to celebrate the city's treasured architecture. It does so with grace and dignity through the measured evoking of images of that architecture's unique patterns.









#### MT. VERNON MILLS RENOVATION STEVENS AND WILKINSON

For approximately 80 years this building served the purpose for which it was designeda cotton mill; in fact, it was the first hydroelectric powered mill in the United States. However, the Mt. Vernon Mills closed its doors and the structure increased its deteriorating process until a group of local businessmen purchased the mill. For several years the South Carolina State Museum had been trying to find a home. Several schemes had been studied in various areas of the city with all being unaffordable. Through a favorable lease-purchase agreement between the developers and the State, the State was able now to have a home for the Museum at a rate equal to one-third the current norm. In addition, the building's area could accommodate other agencies that were bulging at the seams of current space: the S.C. Tax Commission and the S.C. Library for the Handicapped.

Establishing a new identity for the former mill, which for years had been a background building, was essential for the renovated structure to take its proper place among civic buildings. A contrasting space frame is used to accentuate the entry and to provide cover as porte cochere. Three floors of brick arches were removed to create the "front door" slot out of which the space frame extends. This entry axis continues out through the landscaped parking area to Gervais Street. The axis also extends through the building into a glass enclosed atrium.

Another primary design goal in the renovation of the structure was to provide a common thread among the various agencies. Formerly outside, as a transformer yard, the newly created mall space unites the Museum, Tax Commission, Library for the Handicapped, Visitors Center, Restaurant, and Outdoor Exhibit and Dining Space. This enclosed Greenhouse is a hub of activity—all protected from the chance of inclement weather.

Multi-story feature spaces highlight the interior of the building. Special engineering considerations had to be incorporated during the renovation. For example, the auditorium occupies a space on the first and second floors in which several columns and portion of the second floor had to be removed. The loads of the roof, fourth and third floors above were transferred via 3' deep beams to new columns on the end walls.

Elsewhere the simple beauty of the post-andbeam heavy timber construction was left intact and exposed. The Museum lobby actually uses the exposed building system as an historical display of construction. In the open office plan of the Tax Commission, mechanical, lighting, acoustical, and sprinkler systems are distributed via a hand-in-glove finger concept which allows the columns, beams, and decking to remain visible.











Use the asphalt base as a weather proof deck for construction equipment and for stockpiling building materials.

With asphalt base, mud is a thing of the past. The asphalt base is placed directly on the prepared subgrade and can be used almost immediately. It requires no protection from bad weather.

When building construction nears completion, the tough, but smooth, asphalt surface is placed on the durable asphalt base. Then you have a new asphalt pavement surface to complement the grand opening.

S.C. Asphalt Pavement Association Box 11448 Columbia. S.C. 29211

The work in the following section is the creation of two of the newest S. C. interns in the profession. Interns often form the backbone of the productive body within architects' offices and often have the brightest ideas and greatest energy. Their contributions often heavily influcnee the design of our buildings and yet often go unrecognized publicly.

N

The work of these two outstanding architect interns, Julia Floyd Parler with BC Architects and Beau Clowney with Molten-Lamar Architects is provocative and evocative. Both projects were completed as part of academic requirements. Free of normal constraints, these projects contain and explore ideas. This work possesses a creativity that is a credit to the interns themselves and to the firms for which they work.

#### Beau Clowney Tulane University Faculty Award for Best Thesis

The association of experiences and emotions with familiar forms and spaces is the basis for my design work and my interest in architecture. The architect can re-evoke and sharpen these associations by taking these forms and spaces out of their most obvious contexts, transforming and recomposing them to highlight their significance. Growing up in South Carolina and attending architecture school in New Orleans has enabled me to explore areas in architecture that are important because of certain associations in my life.

While studying in London, I became more aware of the extent to which it was a European architectural tradition that had already been displaced and transformed to generate this uniquely American architecture. This experience enabled me further to identify American traditions in Architecture.

The basis for my thesis is the investigation of two materials—concrete and wood. The contrast between the permanence of the concrete and the operable, and possibly temporary nature of wood and their potential relationships are of particular interest to me.

The site is Sullivan's Island, South Carolina, a sleepy residential island situated at the mouth of the Charleston Harbor. Scattered throughout the island are several abandoned concrete military batteries. These massive concrete batteries stand in stark contrast to the sensitive and delicate houses, mostly of timber construction. They are now abandoned anomalies, an almost made-to-order situation for such an investigation. The program consists of a police station, a fire station, a community center, and several residences.

Beau is a South Carolina native and is currently living in Columbia and working with Molten/Lamar Architects, Inc.









#### Presence of Absence A Cemetery Garden for Clemson University

#### Julia Floyd Parler Harlan E. McClure Faculty Award

A presence of absence ... to explore the realm of presence and absence in a cemetery garden ... a presence reiterated through typology and morphology dealing with the cemetery as architecture ... a presence also found through the topography and the natural cycles in dealing with the cemetery as a garden. The concept of place is reiterated by birth, death and rebirth found in the germination of flowers, layering of earth and layering of vegetation. All of these factors would come together as the antithesis of absence, which compounds, confirms, justifies and questions the absence of life. The answers of which are only found through the paradox of life coming from death.

"Death is swallowed up in victory. O death, where is your victory? O death, where is your sting? The sting of death is sin, and the power of sin is the law; but thanks be to God, who gives us the victory through our Lord Jesus Christ." I. CORIN. 15:54-57

The cemetery garden would provide burial for a unique collective body, Clemson University faculty. The method of exploration was a study of cemetery typology in cemeteries as cities, gardens and forests. A typology was then set up for the University cemetery based on the nine disciplines that make up the structure of the University. The design represents the nine colleges, each unique in color, garden expression and geometric form, yet architecturally dependent on the other disciplines for stability, continuity and total expression. The chapels found in the mound of the cemetery serve as a gateway, both to the University and the cemetery itself, with the axis falling in line with Tillman Hall. The cemetery would serve as the spiritual center of the University while Tillman halls serves as the academic center.

The actual burial tombs are semi-buried within the ridge of the highest mound in Clemson. The five oldest colleges on the right are expressed by mounds extending skyward that emulate earth mounds, wells and ruins covered by plantlife. The four newest colleges on the left are expressed by inverted forms that open the entire tomb to the sky. These tombs emulate crevices, deep furrows of farmland and a ruin overgrown by plants.

The cemetery responds to the typology of building, the morphology of burial and plant life, and the topology of the land to create a symbolic place.

Julia is a South Carolina native and is currently living in Columbia and working for Ben Compton Associates.













LIBERT INTS





CITICES CONNERCE





ENGINEELING









IGUCILIULI CIIII

SCAIA REVIEW 47

# BR

Your business started with an idea. And since 1844, The R.L. Bryan Company has helped you turn ideas into action. We've provided office furniture and supplies, business machines, and complete printing services in the past. And we'd like to be part of your future.



# The best room under the sun.



Expand your home with natural light, style and the energy efficiency of a Pella<sup>\*</sup> sunroom. Available in a wide variety of shapes and sizes, Pella sunrooms are engineered with beautiful natural wood inside, aluminum cladding outside, and energy-saving windows, doors and privacy options. Ask our Windowscaping<sup>SM</sup> experts about your place in the sun−only at The Pella Window Store.<sup>\*</sup>

Window Store Store Windows, Doors, Sunrooms & Skylights

The Pella

1621 Woodruff Road Greenville, SC 29607 803/297-1280 PELLA WINDOW & DOOR COMPANY, INC. 6221 Monticello Road P.O. Box 3337 Columbia, South Carolina 29230 Telephone (803) 754-8303

2409 Savannah Highway Charleston, SC 29414 803/571-5676 150 Spanish Wells Road Suite 2 Hilton Head Island, SC 29925 803/681-9393

Bring your home to Pella 111 -

Independence Square 7601 Waters Avenue **Savannah, GA 31406** 912/352-1019 721 Seaboard Industrial Park Myrtle Beach, SC 29577 803/448-4692

140-C Venture Drive Airport Industrial Park Spartanburg, SC 29301 803/576-5939

#### Stewart Acoustical Consultants

Post Office Box 30461 Raleigh, North Carolina 27622 Telephone (919) 781-8824

Architectural Acoustics Environmental Noise Assessment HVAC & Mechanical Equipment Noise Control

> Providing Acoustical Expertise to Architects and Engineers in the Carolinas and Virginia Since 1979

Noral D. Stewart, PhD.

Member - National Council of Acoustical Consultants

# SCAIA ROSTER

#### As of April 30, 1989

#### FELLOWS

FELLOWS CARLISLE, WILLIAM A. Carlisle Associates Columbia CRAIG, KIRK R. Craig, Gaulden & Davis, Architects Greenville GAULDEN, F. E., JR. Craig, Gaulden & Davis, Architects Greenville LUCAS, FRANK E. LS3P Charleston McCLURE, HARLAN E. College of Architecture, Clemson University Clemson McGINTY, RICHARD A. McGiNTY, RICHARD A. McGINTY, ASSOCIATES, Architects Hilton Head MEANS, GEORGE C., JR. Clemson De CHURE FILL C. Clemson ROTH, FREDERICK G. College of Architecture, Clemson University Clemson TARLETON, HAROLD, JR. The Tarleton-Tankersley Group Greenvile THOMAS, JAMES L. Thomas Campbell Pridgeon, Inc. Spartanburg WITHERSPOON, GAYLAND B. College of Architecture, Clemson University Clemson YOUNG, JOSEPH L. College of Architecture, Clemson University Clemson MEMBERSHIP EMERITI

BAYLESS, CHARLES N. Mt. Pleasant BISSETT, T. J., FAIA Columbia BURBANK, ROBERT D. Camden CALIFF, JOHN W. Columbia

Spartanburg CREEL, WRENN M. Simpsonville CURETON, WILLIAM M. Spartanburg EDWARDS, J. DAVID Columbia ELAM, BRANCH D. Hilton Head FORRESTER, HARRISON Pawleys Island FREEMAN, W. E., FAIA Greenville HALLMAN, W. EDWIN Aiken HEARN, H. REID, JR. Columbia HEMPHILL, FRANK D. Columbia HOWELL, A. WYNN Camden JAMES, FRANCIS J. Sumter JAMES, ROBERT S. Sumter KNOWLAND, RALPH E. Anderson LAMBERT, JOHN M. Anderson LILES, CHARLES J. Greenville McCALL, J. D., JR. Columbia McNAIR, ROBERT E. Columbia OLIVER, C. HARDY Hartsville PARROTT, DAVID L. Charleston POLK, GEORGE M., JR. Seneca POOLE, LESTER B., JR. Greenville POTTER, CHARLES L., JR. Myrtle Beach PUTNAM, SAMUEL R., JR. Greenvile RICE, AARON A. Columbia RIDDLE, HAROLD J. Myrtle Beach ROBINSON, CHARLES N. Lancaster SEDBERRY, BOND, JR. Columbia

CHAPMAN, A. HUGH



AYERS, FELIX Graham/Carter/Ayers, Architects Pawley's Island BAKER, W. SCOTT The FWA Group Hilton Head BAKER, CHARLES D., JR. Architectural Concepts Cayce BAKER, THOMAS G. BALER, THOMAS G. BALDWIN, THOMAS S. Southern Management Group Columbia BALLARD, HARRY D. J. Harold Mack & Associates Greenville BANKES, BARRY A. Barry A. Bankes, Architect Greenville BARNES, JAMES F. College of Architecture, Clemson University Clemson BARNES, JAMES P. James P. Barnes & Associates, Ltd. Florence BARNHART, CLARENCE, JR. GMK Associates/GMK Architects Columbia BASHOR, MELVIN, JR. M. W.B. & Company Easley BATES, CHARLES L. Charles L. Bates Associates Johns Island BATES, FRANK C. Design, Inc. Myrle Beach BATSON, LOUIS P., III Louis P. Battson, III, Architects, Inc. Greenville BEAMAN, DANIEL W. Cummings & McCrady Architects Charleston BELL, JOHN EDMOND, JR. McKella-Bell Associates, Inc. Mt. Pleasant BENHAM, DAVID E. Neal, Prince & Partners Greenville BENNETT, JAMES L. Carlisle Associates Columbia BERNET, S. CARL Mt. Pleasant BERNET, S. CARL Mt. Pleasant BERNET, S. CARL Mt. Pleasant BERNET, JAMES L. Carlisle Associates Hilton Head BERNET, KENNETH M. Odell Associates Hilton Head BESTE, GREGORY R. Beste & Associates Hilton Head BESTE, KENNETH M. Odell Associates, Inc. Mt. Pleasent BESTE, GREGORY R. Beste, KENNETH M. Odell Associates, Inc.

BINGER, JAMES A Enwright & Associates Greenville BISHOP, DAVID L. Charleston BISHOP, MARK J. Charleston BLAIR, CLYDE H. Thomas & Denzinger, Architects Charlest BLAKE, JOHN T. McClam/Blake Architects McC.lam/Biake Architects Columbia BLANTON, REBECCA M. Architectural I Clemson BLUME, EDWARD S., JR. Blume, Cannon & Ott Architects Columbia Columbia BOEHM, GARY JOSEPH Glick/Boehm & Associates, Inc. Charleston BOGGS, GLEN B., II Pauline BOLIN, KENNETH O. Architectural Associates Orangeburg BOONE, BRIAN W Charleston BOUDREAUX, JOHN A. Architects Boudreaux, Hultstrand and Carter Columbia BOULTON, R. SCOTT Lexington BOURNE, JON L. Jon L. Bourne, Architect Conway BOWMAN, JOHN D., JR. BOWMAN, JOHN D., JR. Columbia BOYCE, O. DOUGLAS O. Douglas Boyce, Jr., Architects & Associates Charleston BOYKIN, HENRY D. III Henry D. Boykin, III, Architect Camden BRACKETT, ROBIN H. Columbia BRACKETT, ROBIN H. Columbia BRANDT, FREDERICK N. JMBW & Associates Columbia BRENNAN, JAMES J. Stevens & Wilkinson Columbia BROWN, EDWIN L., JR. Hilton Head BROWNING, V. STOKES Browning, McClain, Architects, Inc. Greenville BULTMAN, PHELPS H. Keenan Co. Keenan Co. Columbia

BURNETTE, MELANIE Stevens & Wilkinson Columbia BURRESS, ALICE N. Burress-Osment, Inc. Mt. Pleasant BUTCH, JOHN ALLYN Greene & Associates, Architects Greenville CAMPBELL, C. DARRELL Hanahan CAMPBELL, RICHARD E. Thomas Campbell Pridgeon, Inc. Spartanburg CANNON, ROBERT B., JR. Blume, Cannon & Ott, Architects Columbia CARSON, CHARLES C. Carson Associates, Inc. Columbia CARSON, CHARLES C. Carson Associates, Inc. Columbia CARSON, W. S. W. S. Carson, Architect Hilton Head CARTER, ALLEN R. Columbia CARTER, EDWARD D. Graham/Carter/Ayers, Architects Pawleys Island CARTER, JOEL R. Timbes/Wilund/Usry/Carter Myrtle Beach CASSADAY, VERNE The Piedmont Group Greenville CECIL, OLIVER K. Oliver K. Cecil, ALA, Architect Spartanburg CHARTIER, ROBERT L. JMBW & Associates Columbia CHRISTIAN, ROBERT H. Robert H. Christian, Architect Hilton Head CUSICK, CATHERINE M. Johns Island CLANTON, RICHARD M. Group III Hilton Head CLARK, DOUGLAS Gilick/Boehm & Associates, Inc. Charleston CLARK, FRANKLIN J., III F. J. Clark, Inc. Anderson





The Natural Selection™



Bringing new solutions to the surface<sup>TM</sup>



*Now* available — New Craftwood Laminates offer the benefit of real wood vaneer with a Laminate backer.

#### Ralph Wilson Plastics Co. 2323 Park Central Dr. Decatur, Ga. 30035 (404) 593-2424

JoAnn Landry Specification & Design Coordinator

CLARKE, MARSHALL F. Marshall F. Clarke, Architects Greenville CLAYTON, JOHN C. Jenkins, Hancock & Sides Columbia CLEMENT, WILLIAM J. SC Division of General Service Budget & Control Board Columbia COLEMAN, RALPH M. Barry A. Bankes, Architect Greenville COLLIER, DENNIS L. Neal, Prince & Partners Greenville COLLINS, DONNA G. University of South Carolina Columbia COLMENARES, JAIME P. Greenville COLMENARES, JAIME P. Greenville COMPTON, BEN G. Ben G. Compton, Architect West Columbia CONNOR, WILLIAM K., Jr. Lawson, Connor & Potter, Inc. Myrtle Beach COOK, PAUL R. Easley COOKE, BARRY M. The Piedmont Group Greenville CORKEER, W. DOUGLAS Corkern & Associates, Inc. Hilton Head CRAIG, LYNN G. College of Architecture, Clemson University Clemson CRECH, DAVID A. Mt. Pleasant CRAIG, LYNN G. College of Architecture, Clemson University Clemson CRECH, DAVID A. Mt. Pleasant CRECK, C. WAYNE Hollis & Crocker, Architects Spartanburg CROWE, R. N. R. Nelson Crowe, Architects/Planners Myrtle Beach

CUDDIHEE, DONALD F., SR. Greer DAVIS, MARTIN A. DAVID, MANING A. Seneca DAVIS, WILLIAM T. Craig, Gaulden & Davis, Architects Greenville DAVIS, JESSE C., JR. Curt Davis & Associates Columbia DEICHMAN, M. BRIAN Probuck Delicitiman, M. BRIAN Roebuck DEMOSTHENES, HARRY J. Demosthenes, McCreight, Architects Sumter DENZINGER, HERMANN Thomas & Denzinger, Architects Beaufort Beaufort DENZINGER, MARLENE J. Thomas & Denzinger, Architects Beaufort DeRIENZO, J. MICHAEL J. Michael DeRienzo, Architect Florence DERRICK, JOHN C Architectural Concepts Architectural Concepts Cayce DIAL, CALDWELL R., JR. Caldwell R. Dial, Jr., Architect Columbia DILLING, GERTRUDE Isle of Palms DONAHUE, DENNIS M. Mitchell, Small, Donahue & Logan, Architects Charleston Mitchell, Small, Donahue & Log. Charleston DORN, STEPHEN T. Dorn & Steverson Greenwood DOWIS, GEORGE D. Charleston DOWIS, WILLIAM S., JR. William S. Dowis, Jr., Architect Florence DRAKEFORD, C. M., JR. Drakeford Jackson & Associates/Architects Drakeford Jackson & Associa Sumter DRANE, EDWIN B. Hilton Head DRIVER, MARSHALL M. Marshall M. Driver & Assoc. Seabrook Island DUFFIES, STANLEY B., II Neal, Prince & Partners Greenville DUMAS, IONN G. DUMAS, JOHN G. Summerville DUNCAN, JOSEPH M. Greenville

EARL, RICHARD R. Eason, Earl & Associates, Inc. Greenville
EASON, D. BRUCE
Eason, Earl & Associates, Inc. Greenville
EGGL, MARK S.
Design Partnership, Inc. Greenville
EISENSTADT, LEWIS M.
Odell Associates, Inc. Greenville
EILLS, ROBERT E., JR. The Ellis Group Greenville
ENGLISH, JEROME R. Cummings & McCrady Architects Charleston
EVANS, WILLIAM D. Evans & Schmidt, Architects Charleston
EZKIEL, HARVEY L. AEA, Inc. Columbia
FANT, ALBERT R. Fant & Fant, Architects Anderson
FANT, ALBERT R. Fant & Fant, Architects Anderson
FANT, THOMAS M. Heyward & Assoc., Ltd., AIA Columbia
FANT, CHARLES W., JR. Fant & Fant, Architect Anderson
FARSWORTH, ALVIN L. AI Farnsworth, AIA, Architect Columbia
FANT, CHARLES W., JR. Fant & Fant, Architects Anderson
FARSWORTH, ALVIN L. AI Farnsworth, AIA, Architect Columbia
FANT, CHARLES W., JR. Fant & Fant, Architects Anderson
FISHER, DAVID N. L33P Charleston
FISHER, JOHN W., JR. Anderson
FISHER, JOHN A. John A. Fisher, Architect Florence
FLEETWOOD, CARLTON G. The Wells-Law Group, Architects Aiken
FOSTER, WILLIAM R. Greenville
FOSTER, ARTHUR P., JR. Spartanburg
FRANZ, RICHARD J. Odell Associates, Inc. Greenville

# **Johnson & Higgins** designs Professional Liability Coverages.

We know the field of professional liability protection as few other brokers do. That's why we've won the endorsement of the NCAIA, PENC, and SCAIA. And our worldwide network enables us to negotiate with underwriters everywhere. We'd like to talk with you about this. Call a J&H account executive at 1-800-433-2702 in South Carolina.

# OHNSON IGGINS

JOHNSON & HIGGINS CAROLINAS, INC 50 First Union Tower Charlotte, NC 28282-8265 (~()+) 37+-18+5

**Risk and Insurance Management Services** Human Resources and Actuarial Consulting Throughout the World.

FREDERICK, LINNA J

- FREDERICK, LINNA J. Beaufort FREDERICK, MICHAEL D. Frederick & Frederick Architects Beaufort FREEMAN, ALLEN L. Freeman, Wells & Major, Architects Greenville FREEMAN, GARY D. Summerville Summerville FRICK, MICHAEL M Swansea FULLER, MUNFORD G., SR. Munford G. Fuller, AIA & Associates Florence FULMER, WILLIAM O. Fulmer & Associates Architects Columbia GAILEY, STANLEY D. GMK Associates/GMK Architects GALE, EDGAR B. Gale Architectural Associates Charleston GALLAGHER, THOMAS J., III GALLAGHER, HOMAS J., III Thomas J. Gallagher Architect Charleston GAMBILL, JOSEPH W., JR. VGR Architects N. Augusta GANDY, J. H. J. Harrell Gandy, Architect Charleston Charleston GARBER, MARK B. Mark B. Garber & Associates GARDNER, DONALD Donald Gardner, Architect, Inc. Greenville GARDNER, JOHN E. GARDNER, JOHN E. J. E. Gardner & Associates Mt. Pleasant GARDNER, MARSHALL C., JR. Summers & Gardner, Architects Orangeburg GASQUE, R. B., JR. Columbia GEIGER, WILLIAM N., JR. Development Properties, Inc. Columbia GERBER, ROBERT V. Liollio, Associates, Inc. Liollio Associates, Inc. Charleston GEYER, RONALD E. Greenville GILLEN, RONALD T. Greenville
- GILMORE, THOMAS J. O'Cain, Gilmore & Smith, Architects Spartanburg GLICK, MYLES I. Glick/Boehm & Associates, Inc. Charleston GOFORTH, JOSEPH E. Wilkins, Wood & Associates Wilkins, Wood & Associates Florence GOGGANS, STEVEN W. S. Goggans & Associates, Inc. Pawleys Island GOLIGHTLY, DON E. Design Collaborative, Inc. Columbia GOODSON, ROBERT H. JR. Horeculle Hartsville GOOLSBY, LINDA W. E. Gilbert & Associates w. E. Gilbert & Associates Greenville GORDON, NEIL W. Herman & Gordon, Architects Hilton Head GOTTSHALK, ADDISON, III Charleston GRAGG, LLOYD O. GRAGG, LLOYD O. Gragg and Associates, Inc. Summerville GRAHAM, DAVID A. Graham/Carter/Ayers, Architects Pawleys Island GRAHAM, CHARLES A., JR. Greenville GRAUDIN, STEVEN LS3P Charleston GREENE E. I. GREENE, E. L. Greene & Associates Greenville GRESSETTE, T. A. Stevens & Wilkinson Columbia GRIFFITH HERBERT, AMANDA Awendaw GROSECLOSE, DAVID H. ERS & A Hilton Head GUY, RANDY L. Isle of Palms HACKL, HELMUT W. Sumter HAFER, LANCE G. Fluor Daniel Greenville HALASZ, WILLIAM R. Associate Builders Corporation Myrtle Beach

Ν

KI

808

	FO D			n
LADY ST.®	COLUMBIA, S HALL, JOSEPH Joseph K. Hall,	К.		338
	Hilton Head HAMBRIGHT, J Architecture In Spartanburg HARKINS, KEN Mt. Pleasant HARVLEY, JAM Harvley and As Greenville HEALY, TEREN Fluor Daniel	AMES C., III corporated NETH E. IES F. ssociates		
	Greenville HENDERSON, J Spartanburg HENNING, EMI Greenville HERIN, SAMUE LS3P Charleston HERLONG, STE Stephen P. Hert Saluda	OHN P. L H., III L B. PHEN P. long Architect		
	Hilton Head HEYL, STEPHEN Hilton Head HEYWARD, JOH Heyward & Ass Columbia	I/Usry/Carter RT E., JR. rdon, Architects N IN T., JR. ioc., Ltd., AIA		
	HOLCOMBE, GE The Piedmont of Greenville HOLCOMBE-BU Spartanburg HOLLAND, GEC Holland Architt Aiken HOLLAND, PET Columbia HOLLIS J. T.	Group RDETTE, DON DRGE M. ects	NA L.	
	Hollis & Crocke Spartanburg HOLTZAPPLE, A Fluor Daniel Greenville HORNE, ALAN 1 Townsend Arch Greenville HOWLE, HARR)	ARTHUR R. M. itectural Plannin		



# **THAT ARE RIGHT ON TARGET!**

Group Health Insurance is a wonderful employee benefit...if it offers the coverage employees want and need at a price employers can afford.

The ANET Insurance Program combines extensive medical coverage, cost containment features, a "Take Care of Yourself/Wellness Campaign", and an unbeatable service package to offer a health insurance program designed exclusively for the design professional. The ANET Plan is the plan commended by the SCAIA for its members.

For information on the ANET Group Insurance Program, please call Ken Hobbs or Kathleen McDonnell at:



**Association Administrators** & Consultants, Inc. 19000 MacArthur Boulevard, Suite 500 Irvine, California 92715 1-800-854-0491 Toll Free

# What do you call someone who uses the floor to heat their home?

Smart. Very smart. Because there's no more logical way to heat a home than with the revolutionary Infloor<sup>™</sup> Heating System.

The concept is simple: Hot water tubes or electric heating cables are laid out on the subfloor and then embedded in Gyp-Crete 2000™ Infloor Blend, a flowable floor underlayment. The system warms the underlayment, which gently radiates heat into the room.

It's clean, efficient and unsurpassed in comfort. There's no moving air to create drafts or stir up dust

Just pleasantly warm floors silently radiating heat. And with Infloor, there are no baseboard units, hot-air registers or cold-air returns. Nothing to interfere with the placement of furniture.

For more information, contact: **IVESTER DISTRIBUTORS, INC.** 800-345-3523 Outside N.C. 800-247-5266



HUBERT, EPHRAIM HUBERT, EPHRAIM Greer HULTSTRAND, CHARLES Architects Boudreaux, Hultstrand and Carter Columbia HUND, THOMAS J. The FWA Group Hilton Head INABINET, RANDALL, JR. West Columbia JACKSON, ALAN W. McKellar-Bell Associates, Inc. Mt. Pleasant JACKSON, JOHN B. Drakeford, Jackson & Associates/Architects JACKSON, JOHN B. Drakeford, Jackson & Associates/Architects Sumter JACQUES, JOHN D. College of Architecture, Clemson University Clemson JAMES, ALEX C. James Associates Architectural Corporation Columbia James Associates Architectural Columbia JEFFCOAT, CHARLES G. Columbia JENKINS, WILLIAM B. Jenkins, Hancock & Sides Columbia JOHNSON, ROBERT S. Johnson & Rosser Architects Hilton Head JOHNSON, WILLIAM L. McNair, Johnson & Associates Columbia JOLLY, ALBERT B., JR. Albert B. Jolly, Jr., Architect Spartanburg. Spartanburg JONES, DONALD K. JONES, DONALD K. Greenville JONES, GREGORY T. Eason, Earl & Associates, Inc. Greenville JONES, JAMES P. Davis & Floyd, Inc. Greenwood JUSTICE, SAMUEL D. Design Partnership, Inc. Greenville KARPICK, JOHN G. Lockwood Greene Engineers, Inc. Spartanburg KAUFMAN, ANDERS J. Kaufman Associates, Architects KAUFMAN, ANDERS J. Kaufman Associates, Architects Greenwood KAUFMAN, DAVID H. Louis P. Batson, III, Architects, Inc. Greenville KAY, WILLIAM A Sullivan's Island

KEANE, JAMES T. Keane-Robinson, Architects, Inc. Hilton Head KEENAN, WILLIAM Harmon & Keenan, Architects Columbia KEESHEN, MICHAEL P. Craig, Gaulden & Davis, Architects Craig, Gaulden & Davis, Architect Greenville KEITH, RALPH (TONY) A. Keith Architects, Inc. Greenville KENNEDY, ROBERT H., JR. GMK Associates/GMK Architects Columbia KENT, HAROLD D. Sadler and Kent Inc. Architects Sadler and Kent, Inc. Architects Rock Hill KEY, RANDOLPH S. Florence KEYES, GLENN F. Charlester. Charleston KING, MICHAEL C. Lockwood Green Engineers, Inc. Spartanburg KINGHORN, E. T. The Piedmont Group Greenville KINNINGER, WILLIAM A. Greenville KISHIMOTO, YUJI College of Architecture, Clemson University KLEIN, REGAN E. Taylors KNOWLAND, PETER G. KNOWLAND, PETER G. Clemson KOHN, MICHAEL Drafts & Jumper, Architects, PA West Columbia KOLL, MARK A. Timbes/Wilund/Usry/Carter Myrtle Beach KOPP, MICHAEL R. Simmenville Simpsonville KUNA, TRICIA Safko-Probst Architects, P.A. LAMAR, DICK Molten & Lamar, Architects Columbia LAMBERT, BRUCE Lambert-Tate Architecture Columbia LANGLEY, JOHN B. John B. Langley, AIA Pendleton

LARK, JAMES M. The Ellis Group, P.A. Greenville

- LAW, D. M. The Wells-Law Group, Archits.
- Aiken LAWSON, CHET G.
- LAWSON, CHE1 G. Taylors LAWSON, J. P., JR. Lawson, Connor & Potter, Inc. Myrtle Beach LAYNE, STEPHEN K. Carlisle Associates Columbia LEECH, DAN P. The Piedmont Group Greenville LEE, GEORGE C. George C. Lee, AIA, Architect

- LEE, GEORGE C. George C. Lee, AIA, Architect Charleston LEE, J. A. J. Alison Lee, Architect, Inc. Greenwood LEE, JAKIE H. Lee, McCleskey, Miller, Architects Hilton Head, Columbia LEE, PETER R. College of Architecture, Chapter
- College of Architecture, Clemson University Clemson LEE, SANDERS L.
- LEE, SANDERS L. Lockwood Greene Engineers, Inc. Greenville LIOLLIO, CHERIE A. Liollio Associates, Inc.

- Liolio Associates, Inc. Charleston LIOLLIO, CONSTANTINE D. Liollio Associates, Inc.
- Charleston

- Charleston LIOLLIO, DEMETRIOS C. Liollio Associates, Inc. Charleston LOGAN, SAMUEL S., III Mitchell, Small, Donahue & Logan, Architects Charleston LONG, LONNIE L., JR. Lonnie L. Long, Architect Charleston

- Charleston LOYLESS, J. GERALD CRS Sirrine Company

- CRS Sirrine Company Greenville LYLES, ROBERT T. Stevens & Wilkinson Columbia MACK, J. H. J. Harold Mack & Associates Greenville
- J. Harold Mack & Assoc Greenville MADLINGER, GEORGE
  - Beaufor

MAJOR, CHARLES S., JR. Freeman, Wells & Major, Architects Greenville MARRS, EDWARD R. R. Edward Marrs, Architect, Inc. Myrtle Beach MATTHEWS, J. E. James, DuRant, Matthews and Shelley, Inc. Sumter MAY, KEITH J. Kaufman Associates Architects Kaufman Associates Architects Greenville MAY, PRESCOTT D. MAY, PRESCOTT D. Greenville McANINCH, SUSAN Triad Design Group, Inc. Greenville McCALL, WILLIAM R. William R. McCall, Architects, Inc. Hartsville McCLAIN, RANDALL K. Browning, McClain, Architects, Inc. Greenville McCLAM, ROBERT W. McCLam/Blake Architects Columbia Columbia McCLANAHAN, PAUL B. JMBW & Associates Columbia McCLESKEY, ROBERT G. Fluor Daniel Fluor Daniel Fluor Daniel Greenville McCLESKEY, SAMUEL L., III Lee, McCleskey, Miller, Architects Hilton Head McCREARY, JOEL J. The LPA Group, Inc. Columbia McCREIGHT, CHARLES R. Demosthenes, McCreight, Architects Sumter McELVEEN, W. P. W. Powers McElveen and Associates Columbia McGARITY, NEWMAN C. Westmoreland, McGarity & Pitts Architects Spartanburg McGARITY, CARLISLE M., JR. Westmoreland, McGarity & Pitts, Architects Spartanburg McGEE, H. G. McGEE, H. G. Columbia McKAY, BENTHAM W. McKay Zorn Associates Greenville McKELLAR, PETER A., III McKellar-Bell Associates, Inc. Mt. Pleasant McMilLAN, LESLIE McMillan & Satterfield, Architects Snartanburg McMillan & Satterfield, Architects Spartanburg McMILLAN, MICHAEL McMillan Associates, Architects & Consultants Greenville McMILLIAN, THOMAS W. The Wells-Law Group, Architects Aiken McMURPHY, MICHAEL S. Architects Boudreaux, Hultstrand and Carter Columbia MEEK, MARTIN E. Thomas Campbell Pridgeon, Inc. Spartanburg Spartanburg MENEFEE, CHARLES E., III Clark & Menefee Architects harleston MILLER, JAMES D. Miller-Player & Associates, Architects Greenville MILLER, PAUL R. Lee, McCleskey, Miller, Architects Hilton Head MILLER, THOMAS E. Pegram & Associates, Inc. Myrtle Beach MINSON, FRED H. Minson Architects & Planners Hilton Head MITCHELL, RICHARD D. Greenville MITCHELL, Small, Donahue & Logan, Architects Charleston MOLTEN, RICHARD W., JR. Molten & Lamar Architects Columbia MONTEITH, J. L. Development Properties, Inc. Columbia MOORMANN, H. M. H. M. Moormann Aiken MORF, DEAN H. Stevens & Wilkinson Columbia MOZINGO, S. D. MILLER, JAMES D. Miller-Player & Associates, Architects Columbia MOZINGO, S. D. S. Derrick Mozingo Associates Garden City MULDROW, CHARLES S. LS3P Charleston MUNNERLYN, JOSEPH C., JR. MUNNERLYN, JOSEPH C., Sumter MURPHY, WILLIE W., JR. Architectural Associates Orangeburg NARRAMORE, DAVID L. Narramore Associates, Inc. Greenville

NEAL, JAMES A. Neal, Prince & Partners Greenville NICHOLS, DAVID M. Comprehensive Architects Columbia NORMAN, RICHARD B. College of Architecture, Clemson University Clemson O'CAIN, G. R., JR. O'Cain, Gilmore & Smith Architects Architects Spartanburg ODOM, RUTH TODD Columbia OSMENT, RICHARD D. Burriss-Osment, Inc. Mt. Pleasant OTT, A. L. Blume, Cannon & Ott, Architects Columbia PACE, KENNETH L. Columbia PACE, KENNETH L. Columbia PAJAK, FRAZER, S., M. Lockwood Greene Engineers, Inc. Spartanburg PARILLO, JOHN A. Craig, Gaulden & Davis, Architects Greenville PARKS, RUSSELL P. Odell Associates Inc. Odell Associates, Inc. Greenville PASCULLIS, VITO R. LS3P Charleston PEEKE, DERRICK S. McNair, Johnson & Associates McNair, Johnson & Associates Columbia PEARLSTINE, MAYNARD Charleston PEGRAM, JOSEPH T. Pegram & Associates, Inc. Myrtle Beach PELHAM, WILLIAM H. William H. Pelham, Architect Greenville PELLEGRINO, MICHAEL C. Simpsonville Simpsonville PENNEY, THOMPSON E. LS3P LS3P Charleston PETEET, FRANK Y. Peteet Company Georgetown PFLIEGER, KENNETH Greene & Associates, Architects Greenville PHILLIPS, JAMES James E. Phillips, Architect Greenville Greenville PIERCE, MICHAEL E. Johnson, Knowles, Burgin and Bouknight, Inc. Jonnson, Knowles, Burgin and B Irmo PIKE, JOSEPH C. Pegram & Associates, Inc. Myrtle Beach PINCKNEY, JOHN A. The Tarleton-Tankersley Group Greenville PLOURDE, GALEN G. Mauldin PLOURDE, GALEN G. Mauldin PORCHER, GEORGE George Porcher, Architect, Inc. Charleston POWELL, JOHN M. CRS Sirrine Company Greenville POWELL, JUDITH D. Judith Powell Design Consultant Greenville POWELL, RICHARD L. LS3P Charleston POWELL, STEPHEN P. Summerville POWERS, MICHAEL P. POWERS, MICHAEL P. LS3P Charleston PRINCE, BROOKS R., III Neal, Prince & Partners Greenville PROBST, ROBERT J. West Columbia PROTHRO, JOE E. Greenville PROTHRO, JOE E. Greenville PRUITT, ROBERT J. The Piedmont Group Greenville PUSHKAR, B. P. Design Collaborative, Inc. Columbia QUACKENBUSH, P. DOUGLAS Architects Boudreaux, Hultstrand and Carter Columbia REAGAN, RONALD D. Ron Reagan, Architect, AIA Easley Easley REED, WAYNE M. GMK Associates/GMK Architects GMK Associates/GMK Columbia REED, CHARLES H., JR. Odell Associates, Inc. Greenville REUTER, JOHN P. LS3P Charleston RHOADS, STEPHEN D. Anderson

Anderson

RIDGILL, JOHN O., JR. GMK Associates/GMK Architects Columbia RIESBERG, WILLIAM F. William Riesberg Architects William Riesberg Architects Charleston RINCON, JACK Eason, Earl & Associates, Inc. Greenville RINKER, DAVID P. University of South Carolina Columbia ROBERTS, GUS J. Gus J. Roberts & Associates Columbia ROBINSON, JAMES Y. Keane-Robinson Architects, Ir Keane-Robinson Architects, Inc. Hilton Head ROGERS, COLONEL O., JR. Catalyst Architects Columbia ROGERS, DAVID W. Catalyst Architects Columbia ROGERS, JOSEPH O., III Wilbur Smith & Associates Columbia ROGERS, RAY C., JR. Moore ROOK, BENJAMIN T. ROSEN DELYMATIC T. Greenville ROSE, CHRISTOPHER A. Charleston ROSENBLUM, JEFFREY M. Rosenblum and Associates, Architects Charleston ROSS, GLENN H. ROSS, OLENA II. Florence ROSSER, JOHN T., III Johnson & Rosser Architects Hilton Head RUEGAMER, MICHAEL G. Group III Hilton Head RUMPH, SCOTT W Designtec, P.A. Sumter RUSSELL, STEPHEN A. RÜSSELL, STEPHEN A. Charleston RUSSO, KEN Pendleton SACCO, JOSEPH J. N. Charleston SADLER. MILTON Sadler and Kent, Inc., Architects Rock Hill SAFKO, RON Safko-Probst Architects, P.A. Columbia SALMONS, THOMAS W. Carlisle Associates Columbia SAMPSON, SCOTT Charleston Charleston SATKO, VALENTINE A. GMK Healthcare Columbia SATTERFIELD, DOUG E. McMillan & Satterfield, Architects Spartanburg SCHMIDT, JOSEPH D. Evans & Schmidt, Architects Charleston Charleston SCHMITT, CHRIS Chris Schmitt & Associates, Inc. Charleston SCOTT, CAMERON B. Cheatham & Fletcher Architects Augusta SEABROOK, GEORGE W. Charleston SEITZ, KEITH R. Odell Associates, Inc. Greenville SHELLEY, W. D. James, DuRant, Matthews and Shelley, Inc. Sumter SHEPARD, WILLIAM B. Bluffton SHERRATT, PETER E. Hilton Head Island SHOOK, DAVID L. SBF Design Charleston SIDES, RANDY L. Jenkins, Hancock & Sides Columbia SILANCE, ROBERT T. Clemson SIMMONS, S. SCOTT Craig, Gaulden & Davis Architects Greenville SIMPSON, DAVID M. Greenville SIMS, FAYETTE L. Fluor Daniel Greenville SIMS, WALTER H. Columbia SLATE, CHARLES W. The Piedmont Group Greenville SMALL, JAMES H., III Mitchell, Small, Donahue & Logan, Architects Charleston SMITH, CHARLES T. The Tarleton-Tankersley Group Greenville

SMITH, RON G. Spartan Food Systems, Inc. Spartanburg SMITH, THOMAS N. Mark B. Garber & Associates Greenwood SNOW, DEBORAH A. Studio Indigo Columbia SPENCER, FRANK W., III Frank W. Spencer, III, Architect Hilton Head SPIVEY, MICHAEL W. Michael W. Spivey & Associates Charleston SPRINGS, DENNIS H. Myrtle Beach STAPLETON, LEX WILLIAM Miller-Player & Associates, Architects Greenville STEVERSON, JAMES R. Dorn & Steverson Greenwood SEWART, PETER W. Dafits & Jumper Architects, PA West Columbia STROUD, C. JEFF, JR. Columbia STROUD, C. JEFF, JR. Columbia STROUD, C. JEFF, JR. Columbia STROUP, RICHARD Craig, Gaulden & Davis, Architects Greenville STUBBS, SIDNEY W., JR. LS3P Charleston SUMMERS, J. W. Summers & Gardner, Architects Orangeburg SWIT, CHARLES M. Greer TALMAGE, TED Jenkins, Hancock & Sides Columbia TANKERSLEY, LADSON D. The Tarleton-Tankersley Group Greenville TANKERSLEY, LADSON D. The Tarleton-Tankersley Group Greenville

Columbia TATLER, PHILIP W., JR. The FWA Group Hilton Head TAYLOR, BARRY H. Group III Hilton Head
TAYLOR, JOHN F. Design Collaborative, Inc. Columbia
TAYLOR, J. MICHAEL Design Partnership, Inc. Greenville
THOMAS, JAMES G., JR.
Thomas & Denzinger, Architects
Beaufort
THOMPSON, JOHN L., JR.
Greenville Hospital System Greenville
TIMBES, LARRY C.
Timbes, Wilund/Usry/Carter
Myrtle Beach
TODD, JOSEPH A., JR.
Odell Associates, Inc.
Greenville
TUCKER, C. A.
The Piedmont Group Greenville
TURK, JOHN C.
Columbia
TYNES, RUSSELL E.
Tynes Associates, Inc.
Charleston
USRY, STEPHEN R.
Timbes/Wilund/Usry/Carter
Myrtle Beach
VAN NAME, R. B.
School Facilities Planning Greenville
VAUGHN, JULIE A.
The FWA Group Hilton Head
VENABLE, W. GERALD
The Venable Group Hilton Head
VENABLE, W. GERALD
The Venable Group Hilton Head
VENABLE, W. GERALD
The Venable Group Hilton Head
VENNON, D. D.
D. Dwayne Vernon, AIA, Architect Pawleys Island
VICKER, ROBERT O.
Greenville
VOSO, CHRISTOPHER C.
Wesmoreland, McGarity & Pitts, Architects Spartanburg
VUKOVICH, WILLIAM J.
Charleston
WALACE, LEROY S.
Hilton Head

WALTER, JERRY A. Summerville
WARD, DENNIS S. Munford G. Fuller, AIA & Associates Florence
WARLICK, WILLIAM M. Charleston
WARLICK, WILLIAM M.
Charleston D. Watt, Jr., Architect Anderson
Wells, JAMES D.
Wells, JAMES D.
Wells, JAMES D.
Wells, JAMES D.
Wells, JOHN W.
The Wells-Law Group, Architects Aiken
WESSINGER, JERRY L.
Charleston
WESTBURY, CHARLES
Westhury & Associates Greenville
WHITE, KILLOUGH H.
Charleston
WHITE, MILTON V.
Milton V. White, Architect Anderson
WHITL, BRYAN
Charleston
WHITLEY, R. BRYAN
Charleston
WIGGINS, EDGAR C.
Wiggins & Associates Hilton Head
WILLIAMS, MALACHI Stevens & Wilkinson
Columbia
WILLIAMS, MALACHI Stevens & Wilkinson
Columbia
WILLIAMS, MODWARD W., III Columbia
WILLISON, JOHN L.
Darlington
WILSON, OSCAR E.
Greenville
WILLON, ROBERT
Timebeach
WILUD, ROBERT
Timebeach
WINDHAM, G. WAYNE
Dolphin Corporation
Hilton Head

# **GUIGNARD BRICK**



A Division of Boral Bricks, Inc. P.O. Box 868 Lexington, South Carolina 29072 Telephone (803) 356-1730 Fax (803) 356-2373

The Brick People

Sales Office US #1 & Brickyard Drive, Lexington, S.C. "Quality & Service since 1803"

Ashe Brick Baltimore Brick Burns Brick Delta-Macon Brick Georgia-Carolina Brick Gleason Brick

Guignard Brick Henderson Brick Laurel Brick Lynchburg Brick Merry Brothers Brick Oklahoma Brick The relative cost of a roofing system as a percentage of the cost of the building is 3-4%. Yet the Underwriters of designers errors and omission coverage reported to the NRCA that over 50% of claims were attributable to roof defects.

The Tax Reform Act of 1986 increased the depreciation schedule of roofing to over 311/2 years. Roofing, which before could be totally written off in eight years, now must be depreciated over 311/2 years. It is now incumbent to develop a roof system which will last the depreciation life.

Our R.E.S.T. (Roof Examination Specifications and Testing) Assured Program helps you determine which roof system meets the individual requirements of each project.

If Quality Roofing is a concern of yours contact:

#### ANALYTICAL ROOF SERVICES INC.

327 Eastover Circle Summerville, S.C. 29483 (803) 875-2534

WINE, JAMES C. Tynes Associates, Inc. Charleston
WINESETT, J. D. J. Dean Winsett, AIA, Architect Hilton Head
WOOD, ALLEN P.
Wilkins, Wood & Associates Florence
WOOD, FREDERICK W. The Piedmont Group Greenville
WOOD, AVERY W., JR. Ard-Wood Associates, Architects, Inc. Greenville
WOODRUM, LAWRENCE H. Heyward & Assoc., Ltd., AIA Columbia
WOODWARD, DAVID E., JR. Beaufort
WRIGHT, DAVID S. Odell Associates, Inc. Greenville
YOUNG, LOUIS G., AIA Greenville
ZIGLER, EDWARD T. Craig, Gaulden & Davis, Architects Greenville
ZORN, JACKSON M. McKay Zorn Associates Greenville

#### ASSOCIATE MEMBERS

ALLEN, ANNETTE V. Fluor Daniel Greenville ALLEN, ROBERT K. Fluor Danial Greenville ANGSTADT, JEFFREY G. R. L. Bryan Company Columbia BAILEY, EDWARD W. Charleston BARTON, PHILLIP Louis P. Batson, III, Architects, Inc. Greenville BATEMAN, WILLIAM C., II Wiggins and Associates Hilton Head BENTON, MICHAEL D. Graham/Carter/Ayres, Architects Pawleys Island BOYD, RUSSELL Charleston BRAX, MARY BETH Columbia BRICKELL, PAUL A. Greenville BROWER, PETER P. BROWER, PETER P. BROWN, LAMAR H. College of Architecture, Clemson University Clemson BROWN, RONALD E. CRS Strine Company Greenville BRYAN, JOHN R., JR. Columbia BURKE, JAMES K. Greenville BURT, EVELYN Wilkins, Wood & Associates Florence BUSTO, ALEJANDRO L., IV Cummings & McCrady Architects Charleston CAMPBELL, GERALD D. The Piedmont Group Greenville CAMPBELL, PAUL PHILLIP Greer CARTER, JOEL M. Drafts & Jumper Architects, PA West Columbia CLANCY, MARK G. Craig, Gaulden & Davis Architects Greenville CLARK, CHRIS R. Architrave Columbia CLARKE, KEITH M. Marshall F. Clarke, Architects Greenville CLARK, CHRIS R. Architrave Columbia CLARK, CHRIS R. Architrave Columbia CLARK, CHRIS R. Architecture, P.A. Florence CROUT, R. DURHAM, JR. Clemson DADAMO, RENEE AEA, Inc. Columbia 212 Prescott Drive Salisbury, N.C. 28144 (704) 633-7029

DANIELS, JESSIE L. Timbes/Wilund/Usry/Carter Myrtle Beach DAVIS, MATTHEW J. C. Jeff Stroud, AIA, Architect Columbia DAWSON, NEIL A. Charleston DIXON, DAVID L. Craig, Gaulden & Davis Architects Greenville DONDE, SWATI S. Goose Creek EDENS, ALLEN K. Timbes/Wilund/Usry/Carter Myrtle Beach ELEAZER, ALBERT H. McKay Zorn Associates Greenville FOGLE, JEFF R. Louis P. Batson, III, Architects, Inc. Greenville FOREHAND, HARRY O., JR. Greenville FRANKLIN, RONNIE LEE Dolphin Corporation Hilton Head GABUE, ROBERT E. AEA, INC. Columbia GIBSON, TONY WAYNE Wilkins, Wood & Associates Florence GLASSCOCK, JEFFREY WINN The Wells-Law Group, Architects Aiken GOSS, ROBERT A. Hilton Head GRENE, MICHELLE Pegram & Associates, Inc. Myrtle Beach GRIGGS, WILLIAM J. Lexington HANCE, JAMES T. McClam/Blake Architects Columbia HARTZ, BILL LS3P Charleston

MHOUND N Roofing, Inc. The Top Secret of **Smart Property Managers** For buildings with flat roofs, your best roofing investment is Duro-Last. A complete roofing system, Duro-Last is: custom fabricated to your exact specifications; installed by authorized dealer/contractors; virtually maintenance free; 
 protected by a 15-year warranty, plus a \$6,000,000.00 liability insurance policy. Give your property top protection ... and increased value ... in one easy way; Duro-Last. It's the best. For additional information, call: North & South Carolina **Duro-Last Roofing, Inc.** Steven R. Janke • (919) 869-0420 (800) 248-0280

IIIIIIIIIIIIIIIIIIII

HAWKINS, MARION D., III Design Collaborative, Inc. Columbia HICKMAN, LYNNE H. Neal, Prince & Partners Greenville HILHUYSEN, TIMMY S. Thomas & Denzinger, Architects HINSON, FRANKLIN E. Kaufman Associates Architects Greenwood HOGAN, ROBERT J. Clemson JACQUES, ANNEMARIE H. Pendleton Design Group Pendleton JOHNSON, CHARLES E. AEA, Inc. Columbia JOHNSON, GRETCHEN McKellar-Bell Associates, Inc. Mt. Pleasant JOHNSON, TOMMY K., II JOHNSON, TOMMY K., II Jenkins, Hancock & Sides Columbia JOHNSTON, JOHNATHON S. Freeman, Wells & Major, Architects Greenville KASSINGER, STEPHEN A. Belton KATZ, LORA J. Timbee Willingd User/Control Timbes/Wilund/Usry/Carter Myrtle Beach KEMP, J. MICHAEL Columbia KILGORE, G. SCOTT, SR. Greenville KING, KEITH ALAN Charleston KNIGHT, BRUCE C. GMK Associates/GMK Architects Columbia KRIMM, STEPHEN F. Hilton Head LANDRY, KEVIN P. Greenville LANE, VIRGINIA D. Charleston MACARON, ELIE, JR. Charleston MASON, KAY I. Louis P. Batson, III, Architects, Inc. Greenville MATTISON, DONZA H. Mt. Pleasant

McCLURE, FRANK A., III Rosenblum and Associates, Architects Charleston McFARLAND, GREGORY T. Pegram & Associates, Inc. Myrtle Beach MEHRIZI, MAMOOD M. Fort Mill MITELSTADT, HELEN I. MOBLEY, WILLIAM B. Blume, Cannon & Ott Architects Columbia MONROE, EDWARD P., III Drakeford Jackson & Associates/Architects Sumter MOREHOUSE, GARY MOREHOUSE, GARY Hilton Head NEFF, JOHN BARRY Myrtle Beach NIELSEN, KENNETH Fluor Daniel Greenville O'DELL, TODD B. Wigeing & Accessite Wiggins & Associates Hilton Head O'KELLEY, RANDY V. Seneca PARKER, W. THOMAS PARKER, W. 1HOMAS Lee, McCleskey, Miller Architects Hilton Head PATTISON, JAMES A. Lee, McCleskey, Miller Architects Hilton Head PECKHAM, STEVEN L. Clemson PRY, MICHAEL T. Central REESE, BUDDY M. Dolphin Corporation Hilton Head REILLY, DAVID S. Neal, Prince & Partners Gramuila Neal, Prince & Partners Greenville RHODEN, CHARLES B., JR. South Carolina Electric & Gas Co. Columbia RICE, DAVID L. LS3P Charleston RICH, CHARLES WYTHE G., II Cortern & Associates, Inc. Corkern & Associates, Inc Hilton Head, RUBINO, DANIEL L. Odell Associates, Inc. Greenville SANDERS, KEITH L. Columbia

SCOTT, LESLIE U. Charleston SEASE, TODD Drafts & Jumper Architects, PA West Columbia SEIBELS, GERTRUDE O. Columbia SELLERS, MACKLYN R., JR. Louis P. Batson, III, Architects, Inc. Greenville SHERIDAN, LOUISE C. Charleston SHUMPERT, PAMELA M. AEA, Inc. olumbia SIMES, WOODWARD R. Pegram & Associates, Inc. Myrtle Beach SMITH, BRAD B. Greenville SMITH, JASON L Taylors SMITH, MICHAEL A. Minson Architects & Planners Hilton Head SOBCHUK, LYUDMILA LS3P Charleston Charleston STACKHOUSE, KENNETH Columbia STONE, JULIE A. G. Hilton Head TAYLOR, ANGELA M. Group III Hilton Head TEDEODE DEDEEDT S TEDFORD, ROBERT S. Dolphin Corporation Hilton Head THACKER, N. JACKSON Traditional Concepts Greenville THOMPSON, LARRY GMK Associates/GMK Architects Columbia TURNER, MELISSA L. Hilton Head VAN DYKE, JOEL P. VAN DYKE, JOEL P. Greenville VAN PELT, LISA W. Louis P. Batson, III, Architects, Inc. Greenville VAN PELT, RONNIE S. W. Barry Agnew Architects, Inc. Greenville VINZANI, STEVEN P. Mt. Pleasant WALKER, JAMES S.

Mt. Pleasant



WIENER, PHILIP A.

- Taylors WILSON, RANDY L. Architects Boudreaux, Hultstrand and Carter
- Columbia WOODS, GRADY L., JR. Group III

- Group III Charleston WRIGHT, CHRISTOPHER D. Pegram & Associates, Inc. Myrile Beach WRIGHT, CINDY OWEN Ben G. Compton, Architect West Columbia YOUNG, JOHN L. Gale Architectural Associates Charleston

#### PROFESSIONAL AFFILIATES

- FRUTESIUNAL AF BAKER, JAMES E., JR. Palmetto Electric Cooperative Hilton Head BROOKSHIRE, DRUCILLA Tectonics Engineering Consultant Columbia KENNEY, LAWRENCE M. Hilton Head MARVIN, ROBERT E. Robert E. Marvin & Associates Walterboro

- Robert E. Marvin & Associates Walterboro McELVEEN, DONALD M. GMK Associates/GMK Architects Columbia MORGAN. JOHN The Development Group Columbia PINCKNEY, J. EDWARD Edward Pinckney Associates, Ltd. Hilton Head RABUN, FRANCIS TRUITT, JR. Edward Pinckney Associates, Ltd. Charleston WOOD, PERRY L. Wood & Partners Hilton Head

# PRESENTATIONS GO FLAT, IT'S TIME TO GO 3-D

MODEL AND DESIGN 100 S. Harrington St. Raleigh, NC 27603 919/832-4304

SCALE

If your project has to communicate, then it's time to go three dimensional. You're talking to a tough audience: developers, financiers, municipalities, prospective buyers and tenants. You need every advantage you can get.

Scale Model & Design will give you that advantage. Our distinctive, realistic style of modelmaking will get your project noticed. We make it easy for you, too. Our craftsmen, trained in architecture and design, speak your language. And, we can work with your most demanding schedules.

Let Scale Model & Design give you the advantage of that third dimension. Give us a call to discuss your project, or ask for our brochure.

#### FIRMS

#### AIKEN

- H. M. MOORMANN P.O. Box 2590 29801 648-6833
- HOLLAND ARCHITECTS 222 Park Ave., S.W. 29801
- THE WELLS-LAW GROUP, ARCHITECTS 1075 Brookland Drive 29801 648-9612

#### ANDERSON

- F. J. CLARK, INC. 201 South Murray Avenue 29624 224-1661 FANT & FANT, ARCHITECTS 109½ Sharpe Street 29621
- 226-6171 226-61/1 LONNIE D. WATT, JR., ARCHITECT P.O. Box 1873 29621 226-6215 MILTON V. WHITE, ARCHITECT P.O. Box C 29621 225-7211

#### BEAUFORT

FREDERICK & FREDERICK ARCHITECTS 805 Port Republic Street 29902 522-8422

THOMAS & DENZINGER, ARCHITECTS 920 Bay Street 29902 524-6361

#### CAMDEN

HENRY D. BOYKIN, III, ARCHITECT 605 Monument Square 29020 432-3233

#### CAYCE

ARCHITECTURAL CONCEPTS P.O. Drawer 2085 29171 796-9359

#### CHARLESTON

- CHRIS SCHMITT & ASSOCIATES, INC. 147 Wappoo Creek Drive, Suite 605 29412 795-4415 CLARK & MENEFEE ARCHITECTS 302-B King Street 29401 226-6201

- CONSTANTINE & CONSTANTINE, ARCHITECT 139 Calhoun Street 29403 723-7244 CUMMINGS & McCRADY, ARCHITECTS & ENGINEERS 170 Meeting St., 5th Floor 29401 577-5063 170 Meeting St., 5th Floor 29401 577-5063 DAVID J. ALLISON, ARCHITECT 371 King Street 29401 722-6111 EDWARD PINCKNEY ASSOCIATES, LTD., PROFESSIONAL AFFILIATE 247 Meeting Street, Suite 200 29401 723-9596 EVANS & SCHMIDT, ARCHITECTS 286 Meeting Street 29401 723-5495 GALE ARCHITECTURAL ASSOCIATES, INC., ARCHITECTSPLANNERS 167 East Bay Street, Suite 200 29401 723-6538 GEORGE C. LEE, AIA, ARCHITECT 1820 Savannah Highway, Building D-2 29407 571-2526 GEORGE PORCHER, ARCHITECT, INC. 65-B Broad Street 29401 577-0410 GLICK/BOEHM & ASSOCIATES, INC. GLICK/BOEHM & ASSOCIATES, INC. 247 Meeting Street, Suite 100 29401 7-6377
- S1/-65// GOTTSHALK ARCHITECTS 198 East Bay Street, Suite 300 29401 722-3103 GRIFFITH & KEYES ARCHITECTS 12 Vanderhorst Street 9403 722-4100 GROUP III 215 Fast Bay Suite 304 20401
- 215 East Bay, Suite 304 29401 577-7514
- J. HARRELL GANDY, ARCHITECT 2 Wappo Creek Drive, Unit C 10 29412 795-3464
- 795-3464 LIOLLIO ASSOCIATES, INC. 147 Wappoo Creek Drive, Suite 400 29412 762-2222 LONNIE L. LONG, ARCHITECT 500 Minott Street 29412 577-6515
- LS3F
- LS3P 24 N. Market Street, Suite 300 29401 577-4444 MARSHALL M. DRIVER & ASSOC. 102 Wappoo Creek Drive, Suite 9-C 29412 762-2333
- MICHAEL W. SPIVEY & ASSOCIATES 109 Wappoo Creek Drive, Suite 1-B 29412 795-9370

- MITCHELL, SMALL, DONAHUE & LOGAN, ARCHITECTS 10 N. Atlantic Wharf 29401 723-3407 O. DOUGLAS BOYCE, JR., ARCHITECTS & ASSOCIATES 110 St. Philip Street 29403 577-9949 ROSENBLUM & ASSOCIATES, ARCHITECTS, INC. 121 Wentworth Street 29401 577-6073 STEPHEN A. RUSSELL, ARCHITECT 244 B. Calhoun Street 29401 577-3008 577-3008 THOMAS & DENZINGER, ARCHITECTS P.O. Box 1503 29402 577-5373 THOMAS J. GALLAGHER, AIA, ARCHITECT 115 Three Southpark Circle 29407 571-431 TYNES ASSOCIATES, INC. 3125 Ashley Phosphate Rd., Suite 310 29418 767-0543 W. W. WARLICK, ARCHITECTS 5 Ruitedge Avenue 29401 723-2316 WILLIAM RIESBERG ARCHITECTS

- WILLIAM RIESBERG, ARCHITECTS P.O. Box 30938 29417
- P.O. Bo 577-3431

#### CLEMSON

- ARCHITECTURAL 1 612-B, Hwy. 93 29631 654-7348 PETER G. KNOWLAND, ARCHITECT 201 Calhoun Street 29631

#### **COLUMBIA**

- AEA, INC. 500 Rivermont Road 29210
- 256-8052

- 256-8052 AL FARNSWORTH, AIA, ARCHITECT 6828 N. Trenholm Road 29206 787-8894 ANDERSON ASSOCIATES, ARCHITECT-PLANNERS 1518 Richland Street 29201 254-8788 ARCHITECTS BOUDREAUX, HULTSTRAND AND CARTER, LTD. P.O. Box 5695 29250 799-0247 ARCHITRAVE
- ARCHITRAVE
- 1625 Gadsden Street 29201 252-6636





# Discover the Elegance of Brick.

Quality and prestige in a world of shapes, sizes and colors.





# ement Compan

Major construction projects, designed to span time and architectural trends, command the world's most dependable building material: readi-mixed concrete. Santee Cement has been supplying cement for the South's readi-mixed concrete needs for the last 23 years. We provide cement for the concrete industry for use in water filtration plants, wastewater treatment plants, high-rise office and apartment buildings, dams, parking lots, highways and bridges, and masonry cement products for use in masonry construction.

Call one of our Market Managers for help with your requirements. Toll free: in South Carolina 1-800-922-2348 • Out-of-state 1-800-845-1120

A Subsidiary of DUNDEE Cement Company

- BLUME, CANNON & OTT, ARCHITECTS 3145 Carlisle Street, Suite 101 29205 771-4706
- JEFF STROUD, AIA, ARCHITECT 312 Mallet Hill Road 29923 736-1624
- 736-1624 CALDWELL ROBERTSON DIAL, JR., AIA 4815 Forest Drive 29206 787-1164 CALIFF-AVENT ARCHITECTS, INC. 1777 St. Julian Place, Suite 310 29204 256-1221 CARLISLE ASSOCIATES P.O. Box 11528 29211 252-3232 CARSON ASSOCIATES, INC. 1403 Calhoun Street 29201

- 1403 Calhoun Street 29201
- 252-6106 CATALYST ARCHITECTS
- P.O. Box 11891 29211 254-9001 COMPREHENSIVE ARCHITECTS 1516 Richland Street 29201 254-5050
- CURT DAVIS & ASSOCIATES 1634 Main Street, Suite 90 29201 799-6502
- DESIGN COLLABORATIVE, INC. 3710 Landmark Drive, Suite 408, Landmark IV 29204
- 1201 Advance of the second sec
- 748-1250 FULMER & ASSOCIATES ARCHITECTS 1518 Richland Street 29201 252-4585 GMK ASSOCIATES/GMK ARCHITECTS 1331 Elmwood Avenue 29201 254-2634 GUS J. ROBERTS & ASSOCIATES 7430 Fairfield Road 29203 786-2384

- 786-2384 HARMON & KEENAN, ARCHITECTS 5301 Trenholm Rd., #C 29206 787-7854
- HEYWARD & ASSOC., LTD., AIA 3512 Devine Street, Suite 500 29205 771-4254
- JAMES ASSOCIATES ARCHITECTURAL CORP.
- JAMES ASSOCIATES ARCHITECT 1325 Park Street, Suite 200 29201 252-6150 JENKINS, HANCOCK & SIDES 950 Taylor Street 29201 252-2400 JMBW & Associates 2717 Devine Street 29205 799-6526

McGEE, DAVENPORT, HOWLE & AS 1605 Blossom Street 29201 799-7100 McNAIR, JOHNSON & ASSOCIATES P.O. Box 84 29202 799-5472 MOLTEN & LAMAR ARCHITECT 615 Ott Road 29205 771-7008 SAFKO-PROBST ARCHITECTS, P.A. P.O. Box 942 29202 799-6786 799-6786 STEVENS & WILKINSON P.O. Drawer 7 29202 765-0320 STUDIO INDIGO 828 Whaley Street 29201 254-1224 TECTONICS ENGINEERING CONSULTANT, PROFESSIONAL AFFILIATE 2500 A Devine Street 29205-2408 252-6917 THE LPA GROUP, INC

LAMBERT-TATE ARCHITECTURE P.O. Box 8444 29202 799-5181 McCLAM/BLAKE ARCHITECTS

McGEE, DAVENPORT, HOWLE & ASSOCIATES 1605 Blossom Street 29201

620 Sims Avenue 29205 256-0356

- THE LPA GROUP, INC. 2530 Devine Street 29205 254-2211 W. POWERS MCELVEEN AND ASSOCIATES 1825 St. Julian Place 29204 256-4121 WIII ARCHITECTS 1720 Main Street Swite 102 29201
- 1720 Main Street, Suite 102 29201 799-8991
- WILBUR SMITH & ASSOCIATES P.O. Box 92 29202 738-0580
- CONWAY
- JON L. BOURNE, ARCHITECT P.O. Box 1176 29526 248-2242
- EASLEY
- RON REAGAN/ARCHITECT, AIA P.O. Box 1093 29641 855-3356

#### FLORENCE

J. MICHAEL DERIENZO, ARCHITECT 1202 W. Palmetto Street 29501 662-7651

- JAMES P. BARNES & ASSOCIATES LTD. P.O. Box 790 29502 669-0014 JOHN A. FISHER, ARCHITECT P.O. Box 2332 29503 667-4755
- KEY ARCHITECTURE, P.A. P.O. Box 2296 29503
- 665-6646
- MUNFORD G. FULLER, AIA, & ASSOCIATES P.O. Box 2261 29503 662-9961
- WILKINS, WOODS & ASSOCIATES P.O. Box 3868 29503
- WILLIAM S. DOWIS, JR., ARCHITECT P.O. Box 368 29503 669-5223
- GARDEN CITY
- S. DERRICK MOZINGO & ASSOCIATES 125 B. Dogwood Drive 29576 651-1000

#### GEORGETOWN

- PETEET COMPANY P.O. Box 776 29440 546-3812

#### GREENVILLE

- ARD-WOOD ASSOCIATES ARCHITECTS, INC. 50 S. Richardson Street 29601 242-5450 BARRY A. BANKES, ARCHITECT 14 East Plaza, Lewis Plaza Shop Center 29605 235-3449
- BROWNING, MCCLAIN ARCHITECTS, INC. 12 East Plaza 29605 271-6403
- CRAIG, GAULDEN & DAVIS, ARCHITECTS P.O. Box 2527 29602 242-0761
- CRS SIRRINE COMPANY

- CRS SIRRINE COMPANY P.O. Box 5456 29606 298-6000 DESIGN PARTNERSHIP, INC. 105 North Spring Street 29601 232-8200 DONALD A. GARDNER, ARCHITECT, INC. P.O. Box 16045 29606 288-7850 CRS 29606
- EASON, EARL & ASSOCIATES, INC. One Shelter Place, Suite 501 29601 233-0003

Samuel A. Jones III Architectural Photography 131 Pineview Rd., West Columbia, SC 29169 803-791-4896

K

in tent

# **DON'T GET STUCK WITH INFERIOR STUCCO.**



Perma Crete<sup>™</sup> Stucco is a qualitycontrolled, pre-blended portland cement and selected aggregate composition which includes a waterproofing agent, fade-resistant pigments, and other chemical combinations to provide a longlasting finish.

Perma Crete's finish coat is color through so there is never a need to paint. Available in white and many beautiful colors, it can be trowel applied or sprayed for either a textured or smooth finish.

The buttery consistency makes it easier to apply and its greater spread gives extra coverage making it more economical. All components meet the standards

set forth in ASTM-C929-81 for stucco. Coverage is 6-9 yards per 80 pound bag.



For further information write or call C.L. INDUSTRIES, INC. P.O. Box 13704, 8188 South Orange Avenue, Orlando, Florida 32859-3704 (407) 851-2660; 1-800-333-2660; FAX: (407) 240-2743

- ENWRIGHT ASSOCIATES, INC. P.O. Box 5287 29602 232-8140 FLUOR DANIEL 301 N. Main Street, P.O. Box 19019 29602 298-2500 FREEMAN, WELLS & MAJOR, ARCHITECTS One McDaniel Green 29601 233-1642 GOVEENMENT CONTRACTS CONSULTANT
- GOVERNMENT CONTRACTS CONSULTANTS 1010 East North Street, Suite D-5 29601 232-9342 CREENE 6 CONTRACTS
- GREENE & ASSOCIATES, ARCHITECTS P.O. Box 5559 29606 232-7381 HARVLEY & ASSOCIATES 611 N. Academy Street 29601 233-1120 J. HAROLD MACK & ASSOCIATES 408 North Church Street 29601 233-6342 JAMES E. PHILLIPS, AIA ARCHITECT P.O. Box 26508 29616 233-2305 JUDITH POWELL DESIGN CONSULTAN

- 233-2305 JUDITH POWELL DESIGN CONSULTANT 15 Clarendon Avenue 29609 235-0137
- KEITH ARCHITECTS, INC 512 Pettigru Street 29601 235-2306
- LOUIS P. BATSON, III, ARCHITECTS, INC. 110 Williams Street 29601
- 110 Williams Street 29601 233-2232 M.W.B. & COMPANY 2901 Poinsett Hwy., Suite F, University Square 29609 246-4582 MARSHALL F, CLARKE ARCHITECTS, INC. 5 Century Drive, Suite 220 29607 232-8404 McKAY ZORN ASSOCIATES P.O. Box 10635 29603 242-9719 McMILLAN & ASSOCIATES, ARCHITECTS & CONSULTANTS I Chick Springs Road, Suite 210 29609 235-7441 MIL LER-PLAYER & ASSOCIATES, ARCHITECTS-

- 235-7441 MILLER-PLAYER & ASSOCIATES, ARCHITECTS-PLANNERS, LTD. 1010 East North street, Suite A 29601 242-0177
- 242-0177 NARRAMORE ASSOCIATES, INC. 25 South Laurens Street 29601 242-9881 NEAL, PRINCE & PARTNERS 110 West North Street 29601 235-0405 ODEL ASSOCIATES INC

- ODELL ASSOCIATES, INC. Two Shelter Centre, 75 Beattie Place 29601 235-6600

- THE ELLIS GROUP, P.A. P.O. Box 10223 29601 235-7464 THE PIEDMONT GROUP P.O. Box 1717 29602 242-1717

- P.O. Box 1717 29602 242-1717 THE TARLETON-TANKERSLEY GROUP P.O. Box 26117 29616 235-1611 TOWNSEND ARCHITECTURAL PLANNING GROUP P.O. Box 3917 29608 271-7678 TRIAD DESIGN GROUP, INC. 306 East North Street, 2nd Floor 29601 233-2721 W. BARRY AGNEW ARCHITECT, INC. 316 W. Stone Avenue 29609 242-2514 W. E. GILBERT & ASSOCIATES

- WELLS ASSOCIATES 242-2514 W. E. GILBERT & ASSOCIATES P.O. Box 17217 29606 297-9281 WELLS ASSOCIATES ARCHITECTS 240 Pimlico Road 29607 292-2802 WESTBURY & ASSOCIATES 1310 Augusta Street 29605 233-2440 WILLIAM H. PELHAM, ARCHITECT 2 Williams Street 29601 271-7633

#### GREENWOOD

- DORN & STEVERSON P.O. Box 1425 29648 229-2100

- 229-2100 J. ALISON LEE, ARCHITECT, INC. P.O. Box 3195 29646 229-3709 KAUFMAN ASSOCIATES ARCHITECTS P.O. Drawer A 29648 299-0174 MARK B. GARBER & ASSOCIATES 1 Park Drive, Box P-101 29646 299-7856

#### HARTSVILLE

- ROBERT H. GOODSON, JR., AIA P.O. Box 446 29550 383-5212
- 903-9212 WILLIAM R. McCALL, ARCHITECTS, INC. P.O. Box 1440 29550 332-7443
- HILTON HEAD
- BESTE & ASSOCIATES P.O. Box 21869 29925 842-8700

- CORKERN & ASSOCIATES, INC. P.O. Box 5340 29938 785-4236 DOLPHIN CORPORATION P.O. Box 5912 29938 785-6600 EAST COAST ARCHITECTS, P.A. P.O. Box 5961 29938 681-8000 EDWARD PINCKNEY ASSOCIATES, LTD., PROFESSIONAL AFFILIATE P.O. Box 5339 29938 785-4265 EDWIN B, DRANE, ARCHITECT
- 203-4203 EDWIN B. DRANE, ARCHITECT P.O. Box 4904 29938 686-2336 ERS 6

- 080-2330 ERS & A P.O. Box 6008 29928 785-5007 FRANK SPENCER, III, ARCHITECT P.O. Box 5075 29938 681-5355 GROUP III 10 Pone Ave. Executive Park 29928

- GROUP III 10 Pope Ave., Executive Park 29928 842-3766 HERMAN & GORDON ARCHITECTS P.A. P.O. Box 5415 29938 785-5651 J. DEAN WINSETT, AIA, ARCHITECT 31 Blue Heron Point 29928 681-6373 IOHNSON & POSSED & DOUBLE
- JOHNSON & ROSSER ARCHITECTS P.O. Box 5102 29938 785-2131

- 1.5. BOX 5102 29938 785-2131 JOSEPH K. HALL, ARCHITECTS P.O. Box 5216 29938 842-2936 KEANE-ROBINSON ARCHITECTS, INC. P.O. Box 5455 29938 686-2020 LEE, McCLESKEY, MILLER, ARCHITECTS P.O. Box 5010 29938 785-5171 McGINTY ASSOCIATES, ARCHITECTS 11 Lagoon Road 29928 785-4265 MINSON ARCHITECTS & PLANNERS 5 Office Park, Suite 211 29928 785-2111 PETER E. SHERRATT, ARCHITECT
- 785-2111 PETER E. SHERRATT, ARCHITECT 35 Oyster Landing Lane 29928 671-3364 ROBERT H. CHRISTIAN, ARCHITECT P.O. Box 5, Sea Pines 29938 785-2376 THE FWA GROUP P.O. Box 5910 20038
- P.O. Box 5910 29938 785-2199

THE VENABLE GROUP 11 Palmetto Parkway, Suite 201 29926 681-8424 W. S. CARSON, ARCHITECT P.O. Box 1751 29938 681-2494 WIGGINS AND ASSOCIATES 6-B Lagoon Road 29928 785-5276 WOOD & PARTNERS, PROFESSIONAL AFFILIATE P.O. Box 7427 29938 681-6618

#### IRMO

JOHNSON, KNOWLES, BURGIN & BOUKNIGHT, INC. P.O. Box 1425 29063 732-0860

**ISLE OF PALMS** 

GERTRAUDE M. DILLING, ARCHITECT 51st Avenue, #10 29451 886-6638

#### JOHNS ISLAND

CHARLES L. BATES ASSOCIATES P.O. Box A-147, Kiawah Island 29455 768-5500

#### MARIETTA

ROBERT C. CASHION, ARCHITECT 2926 Geer Hwy. 29661 836-7080

#### MT. PLEASANT

ALICE NIXON BURRESS, AIA 966 Casseque Provence 29464 884-4393

- 884-4393 CARL BERRY, ARCHITECTURE 911 Ebbuide Way 29464 844-1105 J. E. GARDNER & ASSOCIATES 401 B-W Coleman Blvd. 29464 384-7242 McKELLAR-BELL ASSOCIATES, INC. P.O. Box 1076 29464 844-9085 RICHARD D. OSMENT. 411
- 844-9085 RICHARD D. OSMENT, AIA 1233 Ben Sawyer Blvd., Suite C 884-6972

#### **MYRTLE BEACH**

DESIGN, INC., FRANKIE C. BATES 3050 Waccamaw Blvd. 29577 236-2114

- 230-2114 LAWSON, CONNOR & POTTER, INC. 409 12th Ave., North, Suite 1 29577 626-7436
- PEGRAM & ASSOCIATES, INC. P.O. Drawer 7448, Dunes Station 29577
- 449-5202 R. EDWARD MARRS, ARCHITECT, INC. Suite F, Azalea Woods, 1304 Azalea Court 29577 449-0434 R. NELSON CROWE, ARCHITECTS/PLANNER 1010 N, Kings Highway 29577 448-7700
- TIMBES/WILUND/USRY/CARTER, ARCHITECTS & PLANNERS 5001 North Kings Hwy., Rainbow Harbor, Suite 203 29577 449-5204
- N. AUGUSTA

VGR ARCHITECTS 802 E. Martintown Road, BTC 402 29841 279-8267

#### NORTH

RANDALL INABINET, JR., ARCHITECT P.O. Box 644 20112 247-2432

#### ORANGEBURG

ARCHITECTURAL ASSOCIATES P.O. Box 1166 29116 534-8585

- 534-8585 SUMMERS & GARDNER, ARCHITECTS 540 Russell St., SE 29115 536-0025

#### **PAWLEYS ISLAND**

- GOGGANS & ASSOCIATES, INC. P.O. Box 1859 29585 237-3421
- D. DWAYNE VERNON, AIA, ARCHITECT P.O. Box 1966 29585
- 237-2783 GRAHAM/CARTER/AYRES, ARCHITECTS P.O. Box 888 29585 237-3488

#### PENDLETON

- JOHN B. LANGLEY, AIA Route 1, Box 85-D 29670 646-7889
- 646-7889 PENDLETON DESIGN GROUP P.O. Box 145 29870 646-7866 WITHERSPOON & KNOWLAND, ARCHITECTS P.O. Box 496 29670
- P.O. Box 496 646-3787

# DIGICAD, INC.

#### CAD SERVICE BUREAU

#### SERVICES:

- Computer Aided Drafting Services
- **Digitizing Existing Details**
- Drawing Conversion Output in AutoCad Format
- Plotting for Vellum, Mylar and Paper

Large projects quoted on a custom basis after review of typical documents.

DIGICAD, INC. P.O. Box 3275 • Hilton Head Is., S.C. 29928 (803) 671-1125

#### **ROCK HILL**

SADLER & KENT, INC., ARCHITECTS P.O. Box 4155 CRS 29731 327-1171

#### SALUDA

STEPHEN P. HERLONG, ARCHITECT P.O. Box 566 29138

#### SPARTANBURG

- ALBERT BAILEY JOLLY, JR., ARCHITECT P.O. Box 2173 29302 582-1510
- ARCHITECTURE INCORPORATED P.O. Box 706 29304 582-7110
- HOLLIS & CROCKER, ARCHITECTS 400 Hillcreast Offices 29302
- 400 Hillcreast Offices 29302 582-5269 LOCKWOOD GREENE ENGINEERS, INC. P.O. Box 491 29304 587-2000 McMILLAN & SATTERFIELD ARCHITECTS P.O. Box 5145 29304 583-7480 CCAIN GUI MODE & SMITH ARCHITECTS

- 583-7480 O'CAIN, GILMORE & SMITH ARCHITECTS P.O. Box 1205 29301 583-7275 OLIVER K. CECIL, AIA, ARCHITECT 2407 S. Pine Street 29302 583-7503 THOMAS CAMPBELL PRIDGEON, INC. P.O. Box 3028 29304 583-1456 WESTMORELAND McGAPITY PITTS APC

- 903-1430 WESTMORELAND, McGARITY, PITTS, ARCHITECTS P.O. Box 2685 29304 582-2929

#### SUMMERVILLE

GRAGG & ASSOCIATES, INC. 818 North Cedar 29483 875-4298

#### SUMTER

ANDERSON ARCHITECTS 422 W. Calhoun Street 29150 773-4414

773-4414 DEMOSTHENES, McCREIGHT, ARCHITECTS 202 W. Calhoun Street 29150 773-3211 DESIGNTEC, P.A. 12 N. Washington Street 29150 773-2700 DRAKEFORD JACKSON & ASSOC./ARCH. 120 N. Main Street 29150 773-4328 JAMES, DuRANT, MATTHEWS & SHELLEY, INC. 128 East Liberty Street 29150 773-3318

#### WALTERBORO

ROBERT E. MARVIN & ASSOCIATES, PROFESSIONAL AFFILIATE Route 4, Box 10 29488 538-5471

#### WEST COLUMBIA

BEN G. COMPTON, ARCHITECT 1512 Augusta Road 29169 791-5350 DRAFTS & JUMPER, ARCHITECTS, P.A. 550 Meeting Street 29169 791-1020

NEED HELP SELECTING AN ARCHITECT? THE A.I.A. CAN HELP. CALL 252-6050.

ASK ABOUT QUALIFICATION BASED SELECTION.

#### A DOOR THIS STYLISH HAS NO RIGHT TO BE THIS PRACTICAL.

The Andersen<sup>®</sup> Frenchwood<sup>®</sup> Hinged Patio Door. It's more than just beautiful wood and pretty brass handles.

It's the only hinged patio door that survives eight inches of rain per hour, driven by 50 mph horizontal winds, without leaking. Plus, it's available in a number of sizes. So you shouldn't have any trouble finding one to fit your needs.

Just stop in today. We'll show you the door that's taking America by storm. The Frenchwood Hinged Patio Door from Andersen.



Morgan Distribution 128 McQueen St. Air South Industrial Park West Columbia, SC (803) 791-5634 89929 © 1989 Andersen Corp.





# VET-O-VITZ REINFORCED PANELIZED MASONRY

combines Technology and Craftsmanship...

Design Freedom 
 Superior Quality
 Full Wythe Brick
 Clear Spans
 Fast Completion
 New Construction
 Renovation







Vet•O•Vitz Masonry Systems, Inc.

2786 CENTER ROAD, BRUNSWICK, OHIO 44212 (216) 225-9175, FAX (216) 225-8775



# A great place to start...



# ... when looking for a fabulous finish!

Come stimulate your imagination with the largest selection of quality porcelain, granite, marble and other natural stone tiles in the Southeast.

When your next project requires uniqueness and quality... visit our Architectural Showroom located at 2660G Yonkers Road, Raleigh, North Carolina.

DESIGN MATERIALS, INC. • P.O. BOX 27685 • RALEIGH, NORTH CAROLINA 27611 • PHONE (919) 821-5200

SCAIA REVIEW 67

# Craftsmanship Worthy Of Your Designs.



Finely Crafted Custom Millwork You'll find old-world craftsmanship in every door, window, mantle, and stair we custom build. We specialize in exactly matching your

specifications in every detail. We also sell Therma-Tru doors and Hurd windows, two of the finest manufactured components available.

For the quality you may have thought was gone for good, until now, contact Carolina Components in Greenville 803-234-0420 or Columbia 803-776-2100.

CAROLINA

Locations in: Raleigh • Greensboro • Charlotte • Richmond • Newport News • Greenville • Columbia

# **DuPont Tyvek** Housewrap Towers Above The Rest!



#### **AIR RESISTANCE**

The longer it takes air to pass through a material, the better air barrier it is. **TYVEK** Housewrap is an excellent air barrier, stopping most outside air from coming in through cracks and seams—thereby dramatically increasing the energy efficiency of a home. In independent lab tests **TYVEK performed** 8 **Times Better than either TYPAR**: or **BARRICADE**: .\*

Test Method: TAPPI T-460

#### **MOISTURE VAPOR TRANSMISSION**

TYVEK Housewrap has excellent moisture vapor transmission. It allows vapor to pass through, reducing the chance of harmful in-wall condensation buildup which can damage walls and insulation. On this score TYVEK performs Four Times Better than either TYPAR' or BARRICADE'.

Test Method: ASTM E-96 (Procedure B)

#### WATER RESISTANCE

Because **TYVEK** Housewrap has excellent water resistance, it acts as a water barrier during construction. It also acts as a secondary water barrier after construction and is particularly helpful in areas of weeping. In independent lab tests **TYVEK was Six Times more water resistant** than either **TYPAR' or BARRICADE**. \*\* Test Method: AATCC 127

\* Based on independent test lab data. Further information on these tests is available upon request by writing to: TYVEK Test,DuPont Company, Laurel Run, PO Box 80, Bldg. 705, Rm. 2N45, Wilmington, DE 19880-705





PLUNKETT-WEBSTER, INC.

DISTRIBUTED BY: -



In North Carolina, Eastern South Carolina

NC WATS 800/432-3753

OUTSIDE NC 800/845-6160



# Sculptured Rock is your natural choice for a permanent and beautiful landscape.



RETAINING WALL SYSTEMS



**KeyStone**<sup>®</sup> retaining walls are designed to function beautifully for a lifetime, providing long term savings compared to timbers which will deteriorate.

There are no metal members in **KeyStone** to rust away, such as found in timbers.

No cumbersome tools, mortars, cutting or preservative treatments are required with **KeyStone**, and the wall goes up in half the time of old methods.

#### **Build it to last!**

- Individual concrete units locked together with fiberglass dowels.
- Available in 8" or 4" high mini-units.
- · Choice of face, color and texture.
- · Strong, permanent and maintenance free.
- Quick and easy installation reduces labor.



P.O. Box 669264 Charlotte, North Carolina 28266 - 9264 (704) 527- 5080 or (800) 545-5080 U.S. POSTAGE PAID COLUMBIA, S. C. PERMIT NO. 973