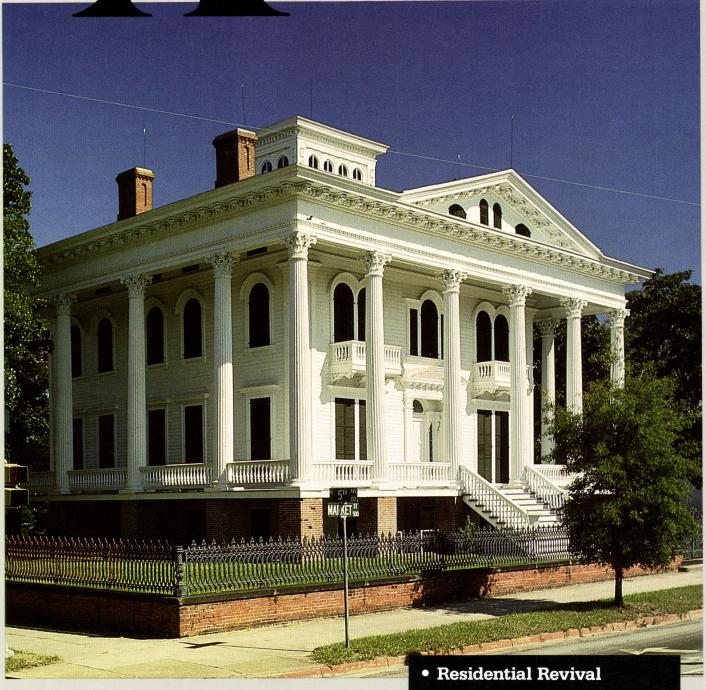
Bulk Rate U.S. Postage PAID Raleigh, N.C. Permit No. 455 Nonprofit Org.



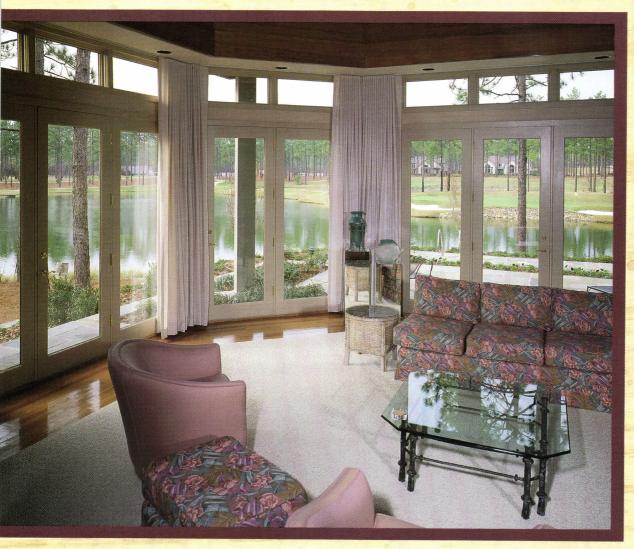
NORTH CAROLINA ARCHITECTURE

MARCH-APRIL, 1990



Architectural Photography

Imagine...







Then Call Us 1-800-868-7150



Architect: Art Harden

Builder: McCrimmon Construction Development: Pinehurst National

Location: Pinehurst, N.C.

TERRAZZO



IT ONLY LOOKS EXPENSIVE.

Terrazzo offers the best cost value and durability for most flooring applications. Let David Allen Company assist you with

Let David Allen Company assist you with budget prices, technical information and specifications. For more information call:

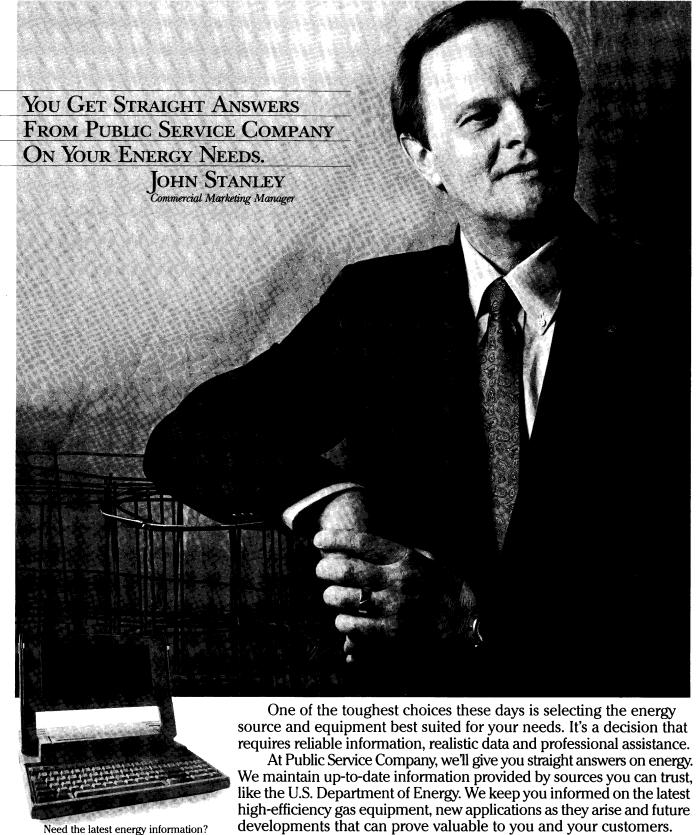
Raleigh, NC (919) 821 · 7100

Washington, DC (703) 690 · 4422

Orlando, FL (407) 420·1000



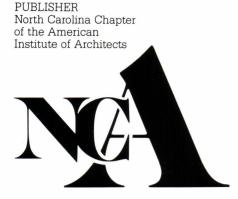
DAVID ALLEN CO



Just ask us. What you won't get from Public Service Company are vague results from independent studies. Or self-serving claims that can't be backed up by facts.

We're committed to helping you examine and select the energy options that deliver value, long-term effectiveness and reliability. That's the kind of information that your customers expect from you, and we'll make certain that you have it.

PUBLIC SERVICE COMPANY



NCAIA PRESIDENT Lloyd G. Walter Jr., AIA

STAFF

EDITOR Sharon Kilby

GRAPHIC DESIGN Blagdon Smart Design Studio

DIRECTOR OF ADMINISTRATION/ SPECIAL PROJECTS Michelle Goode

STAFF SECRETARY Jo Ellen Mitchell

COMPUTER PROCESSOR/ OFFICE ASSISTANT Amelia Pryor

PRINTING PBM Graphics, Inc.

TYPOGRAPHY Paragraphics, Inc.

ADVISORY BOARD

Walter T. Vick III, AIA Alva H. Ward III, AIA John F. Thompson, AIA Stephen L. Meehan, Consultant

NCAIA is not responsible for statements or opinions expressed in North Carolina Architecture (ISSN 1045-3253), nor do such statements necessarily express the view of NCAIA or its committees. North Carolina Architecture is published six times a year by the North Carolina Chapter of the American Institute of Architects. Advertising and editorial offices are located at 115 W. Morgan St., Raleigh, N.C. 27601. Address editorial, advertising and circulation correspondence to North Carolina Architecture, 115 W. Morgan St., Raleigh, N.C. 27601. Telephone (919) 833-6656. Subscription rate: \$30 a year for non-NCAIA members. Third class postage (permit number 455) paid at Raleigh, N.C. Copyright 1990 by NCAIA. POSTMASTER: Send Form 3579 to North Carolina Architecture, 115 W. Morgan St., Raleigh, NC 27601.

4

Residential Revival

Architects revive old houses and create homes in uncommon places through renovation and restoration

16

Picture Perfect

A look at architectural photographers and the angles they take to make our buildings look good

20

Get the Picture—Instantly

Instant photography as a working tool

23

A Whirlybird's Eye View

A budding architect turns a hobby into a business

26

Elevations

An architect finds inspiration for the present in the forms of the past

29

Off the Drawing Board

Who's designing what, where in North Carolina, plus names and changes among the state's design firms

36

New Products

New ideas, new solutions, new equipment and new twists on old angles for designers and builders





Top: A warehouse in Raleigh is transformed into a loft-like home by Burnstudio Architects.

Photo by Allen Weiss.

Above: Photographer Joseph Ciarlante reveals his style in a photo of Sonoco Products Co. Headquarters in Hartsville, S.C.

Cover: The Bellamy Mansion in Wilmington glimmers with promise for a complete restoration of a 19th-century treasure.

Photo by William J. Boney Jr.

1990 SPONSORS—NORTH CAROLINA ARCHITECTURE

Applegate Architects Edwin Bouldin Architect, PA

R.S. Griffin & Associates

Robert W. Carr, Inc./Associated Architects

CBSA Architects, Inc. ced Architects

Boney Architects, Inc.

Walter Davis, Architect, PA

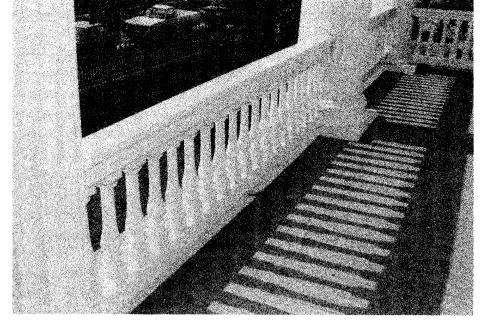
Dellinger Lee Nichols Howell Associates Architects

Danie A. Johnson, AIA-Architect

O'Brien/Atkins Associates, PA

Peterson Associates, p.a.

Walter Robbs Callahan & Pierce-Architects, PA



Residential Revival

Old buildings are finding new niches in North Carolina as architects create new residential spaces in structures noteworthy for their historical significance, uniqueness, originality or practicality.

Here's a sampling that ranges from a grandiloquent antebellum mansion to a refurbished home for incurables.

An Antebellum Beauty

With its beautifully proportioned Corinthian columns and intricately carved capitals, the five-story Bellamy Mansion at Fifth and Market streets in Wilmington is an illuminating example of the Greek Revival architecture that flourished in the South before the Civil War.

Today, the home's exterior has been restored to its 19th century splendor, and its restorers are turning their attention to the interior—extensively damaged by fire 18 years ago.

The house was completed in 1859 for Dr. John Bellamy, a physician, and his family. But the Bellamys were soon displaced. In 1865, the mansion was appropriated as General Military Headquarters for the Commanding General of the Occupation Forces. It was there that slaves were issued their passes to freedom.

Although the house was returned to the Bellamys and remained in the family's possession until 1972, it was unoccupied for nearly 30 years. In 1972, it was donated to Bellamy Mansion Inc., a non-profit organization

formed to preserve and restore it. That same year, arsonists started a fire that caused extensive interior damage.

Recently deeded to the Historic Preservation Foundation of North Carolina Inc., the house is being restored by Boney Architects. And Leslie N. Boney Jr., AIA, principal-incharge, is more than professionally involved. Dr. John Bellamy was his wife's great-grandfather, and in 1954 the Boneys held their wedding reception at the mansion.

Boney's inquiries have turned up

the diary of Rufus W. Bunnell, a young architect who worked on the design of the house for architect James F. Post. Besides solving mysteries about its original structure, Bunnell's diary tells much about the historical context in which it was built, including the reaction of locals to a "Yankee" architect in their midst.

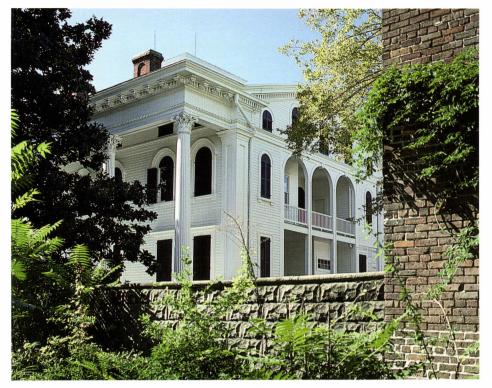
Over the past 15 years, Bellamy Mansion Inc. has invested about \$250,000 in improvements to stabilize and preserve the house. In 1973, the roof was repaired, new built-in gutters were installed, wood railings, balusters and damaged moldings were restored to their original contours. Paint scrapings indicated the house had probably not been painted in this century.

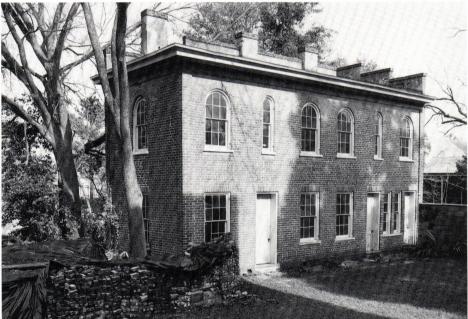
In 1987, the house was repainted, a new acrylic coating was applied to arrest deterioration of the original tin roof, and new fence castings were made to replace sections damaged by tree limbs during a hurricane. The exterior of the servant's quarters has been restored, and the foundation of a carriage house, which was razed in the 1940s, has been preserved for future reconstruction.

This year, a campaign is under way to raise \$600,000 for interior restora-



Before getting a new coat of paint, the Bellamy Mansion was stripped of old paint and its balusters, railing and moldings were repaired and restored.





Top: A view of the side and rear of the mansion, revealing the graceful arches of its many porches and verandas. Above: The servants' quarters came complete with built-in "privies" behind the two doors and windows on the right. Right: The study where vandals started a fire in 1972 that spread to damage much of the interior, including the main front entry, far right.

All photos by William J. Boney Jr.

Bellamy Mansion Restoration Wilmington Architect: Boney Architects



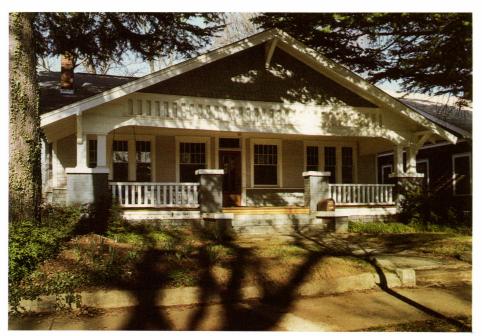
tion that will add modern heating, air conditioning and electrical wiring systems but take the house back to the 1860 period in finishes and furniture. When the work is done, the Bellamy Mansion will take its place on the tourist trail as a museum house—a preserved piece of the past.

Southern Comfort

An old Southern neighborhood has a lived-in feel that no new subdivision can duplicate. The trees are huge and protective; the gardens full of blooming perennials, bulbs and large old shrubs. Generous porches encourage talking; worn sidewalks urge walking. Neighbors span the ages from grandmothers to babes.

Throughout North Carolina, these older neighborhoods have enjoyed a renaissance as people have discovered anew the sense of belonging and stability of old houses in old settings. But times have changed. Today's owners want more light, flowing traffic patterns, open spaces, energy efficiency, loaded kitchens and luxurious baths. So while the restored exteriors may look familiar, the spaces inside are filled with surprises, as architects make these houses fit today's needs.





The cozy, comfortable look of this 1920s bungalow in Charlotte's Dilworth shines through its new paint, but the real surprise is the interior (below), where a raised living room ceiling creates a dramatic, two-story contemporary space.

Photos by Mitchell Kearney.



Here is what happened to two houses in Dilworth, an historic neighborhood near downtown Charlotte that is enjoying a rebirth.

In renovating a 1920s bungalow at 509 East Kingston Avenue, the challenge for Gross Associates was to gain an open and contemporary feeling while retaining the home's details and charms. The task was complicated by the need to incorporate new mechanical and electrical systems in the 2,400-square-foot house.

For an expansive feeling, the archi-

Residence

Charlotte

Architect: Gross Associates, Charlotte

Cabinetry: WooDesign Tile Work: Ervin Tile

tects removed the living room ceiling to create a dramatic two-story space and reveal a cruciform roofline. By lowering ceilings in other first-floor areas, they created a second-floor master suite where none existed before. This suite overlooks the two-story entrance; the spaces were tied together by the use of lapped beveled redwood siding on the ceilings over both areas. A narrow switchback stair contained by a minimal pipe rail connects the floors.

"The fine period moldings, columns, fireplaces, flooring and lights were saved while the complete renovation was undertaken," Jim Gross, AIA, said. "Where new construction was required, we took our cues from the existing materials. Once the trade work was completed, the old elements were incorporated and now coexist with contemporary spaces and fixtures."

On the exterior, cement shingles were removed to reveal the house's original cedar shingles. The masonry base was re-pointed and stuccoed. The entire house was sanded to bare wood and painted to give the home a gleaming start on a new life.

Elsewhere in Dilworth, Calvin Hefner, an interior designer, had long admired the small 1920s stucco house that he now calls home. He liked the Spanish Deco flair that set it apart—the flat roof, tower and rounded door. But the drama did not enter the door. Inside, the house was plain and chopped up into small spaces.

The renovation by Camas Associates Architects focused on carrying out the Spanish Deco theme in all new interior spaces, leaving little of the original beyond the front door and the wood floors in the living room, which are now bleached.

The rear of the house, in which much rot-damage had to be repaired, had no view and was close to a neighbor. The architect took out the windows and installed glass block in the Hefner Residence

Charlotte

Architect: Camas Associates Architects PA, Charlotte

Client: Calvin Hefner, ASID

walls of the kitchen, bath and upstairs bedroom.

Elsewhere, larger Greek-cross windows replaced doublehung windows, and an oversized window was installed in the front, opening onto a full view of a huge oak tree.

The dining room, den and kitchen of the 1,200-square-foot house is on a slightly lower level than the living room. To improve traffic flow, a second set of steps to the lower level was installed by the fireplace.

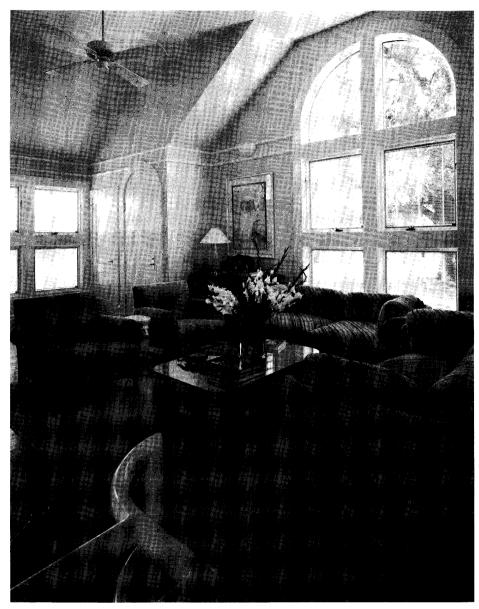
To give prominence to the fireplace, Camas, AIA, framed it with a stepped-out wall and covered it in marble, stepped back like a waterfall. (The marble is repeated on a built-in breakfront in the dining room.) On either side above the fireplace, arched openings provide views into the second floor. White metal pipe rails in these openings link up with matching white ceiling molding, custom made to the same size. The rail is repeated at the new steps to the lower level. Such details unify and delineate the home's new contemporary spaces.

A Better Future

Not all old homes are so promising. Low-income housing projects that went up in the 1950s—apparently modeled after military barracks—often were starkly utilitarian, devoid of character and distinction. When the Hillcrest housing project in Asheville was built in 1958, it's unlikely anyone asked potential residents what they needed or how they lived their lives.

Last year, Hillcrest residents got a chance to speak their mind, and this year they are seeing concrete results. At a time when little federal money is going into low-income housing, the Asheville Housing Authority won a \$4.8 million grant to modernize and renovate Hillcrest's 234 units.

Spaceplan/Architecture, the firm handling the renovation, met with residents, from pre-schoolers to senior



Added Greek-cross windows and an oversized window in the living room bathe this stucco home in Dilworth with the light that was lacking in the original plan.

Photo by JoAnn Sieburg-Baker.

citizens, to learn what bugs them and what would make their lives richer—given a budget that wouldn't allow for enlarging the units or building new ones.

The meetings generated more than 400 suggestions. Older residents wanted a front porch where they could visit with neighbors. Young parents wanted a rear patio where they could barbecue hamburgers and watch their children. Kids, who drew pictures of dream houses and playgrounds, asked for a big covered sandbox, a sliding board, a tunnel to climb through and a place for flowers.

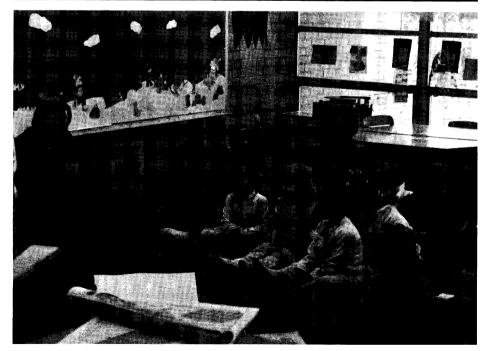
Intent on a less institutionalized environment, the architects added

gables, "strong symbols of home," John Legerton of Spaceplan said. The gables, finished off in varying designs, help distinguish one unit from another. Different colors from unit to unit and from building to building further delineate individual spaces.

The new units have covered front porches and rear patios with exterior storage units. New amenities include retractable clotheslines, insulated doors, hidden gas lines and ducts, washer and dryer connections and mini-blinds on all the windows. On the second floor, old vinyl flooring was ripped off hardwood floors, which were sanded and refinished. New







Spaceplan/Architecture met with residents of all ages, including these children who drew pictures of dream homes and sliding boards for the architects.

The unrelenting sameness of a 50s housing project in Asheville is infused with symbols of home—gables and designs of varied patterns and colors and real porches instead of tiny stoops.

vinyl tile covers the downstairs floor. Kitchens and baths were completely remodeled.

The grounds got a lift as well, with wider sidewalks, refurbished and new playground equipment, an improved basketball court, landscaped islands along the road, a landscape buffer screening the project from Interstate 240, new seating and trash receptacles.

The result is a more liveable community with better security and traffic safety; a more inviting and individualized appearance; better community spaces that are easy to maintain.

Some day, residents may truly call their apartment home. The rehabilitation of the project was designed to tie into a long-term goal of private home ownership for Hillcrest's tenants.

Hillcrest Apartments Modernization Asheville

Architect: Spaceplan/Architecture,

Interiors & Planning PA
Client: Housing Authority of the City of

Asheville
Landscape Architect: John A. Broadbrooks.

ASLA, Asheville Structural Engineers: Sutton-Kennerly

Associates, Asheville Mechanical, Plumbing & Electrical

Engineers: Barge, Waggoner, Sumner & Cannon, Knoxville, TN

Contractors: Rogers & Wenger, Florence, SC; H.M. Rice & Son, Asheville; Housing Authority Maintenance Personnel

Raulston Residence

Raleigh

Architect: Burnstudio Architects, PA,

Raleigh Client: J.C. Raulston

Structural Engineer: Lysaght & Associates,

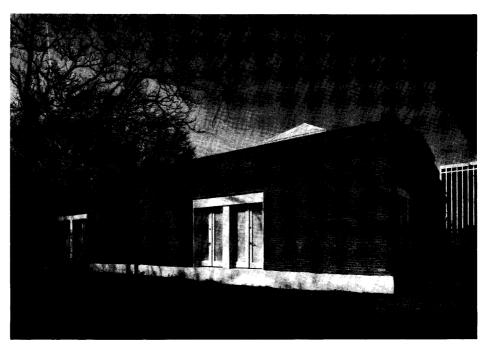
Raleigh

Mechanical Engineer: Southeastern Engineering Associates, PA, Raleigh Electrical Engineer: Southeastern Engineering Associates, PA, Raleigh General Contractor: Coleridge Homes, Raleigh

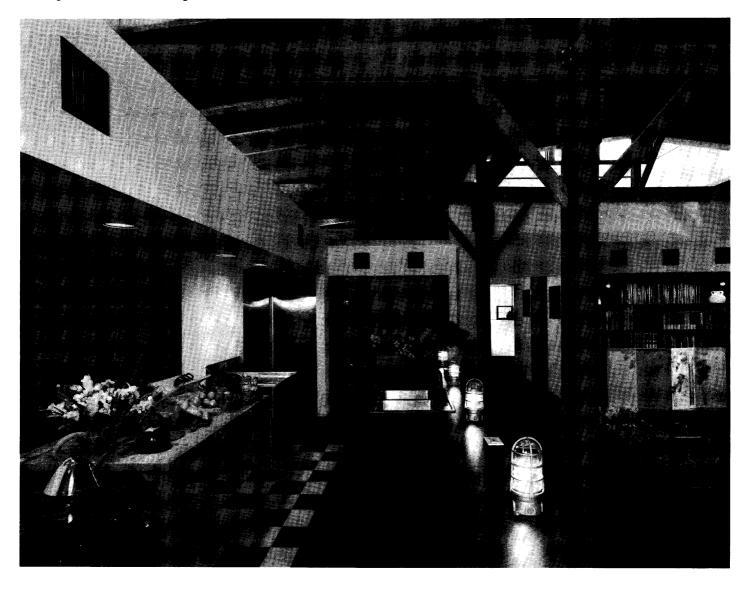
Downtown after Dark

While residential enclaves near downtown that were once considered risky are now considered trendy, the idea of settling in for the night in downtown itself still rattles many North Carolinians.

But just as pioneers reclaimed the neighborhoods, a few brave souls are finding that downtown living is safe



An old warehouse in Raleigh becomes home—not by obliterating or obscuring the original structure but by building the new within the old and allowing both to enrich the whole. Photos by Allen Weiss.





A pioneering effort in Asheville incorporates upscale apartments within old downtown structures, with retail spaces at the ground level. The apartment below features an open living plan with more space than is generally allowed in new construction.

Photo by Jeff Griesmaier



and convenient. Under the best circumstances, downtown spaces offer opportunities for carving out distinctive residential spaces, as architects in Raleigh and Asheville have discovered.

In the Downtown East Development Area of Raleigh, Burnstudio turned an abandoned brick warehouse into a "loft" dwelling that retained some of the openness of the original warehouse but provided varying degrees of separation and privacy.

The \$110,000 renovation converted 3,650 square feet into a master bed-

60 Haywood

Asheville

Architect: J.E. Samsel, AIA, Asheville Client: City Assets Corporation, Asheville General Contractor: City Assets Corporation, Asheville

room suite, guest suite, private study and a spacious kitchen and living area for entertaining on a large scale.

The architects treated new construction as a freestanding structure within the warehouse shell. Composed of clean, contemporary materials and lines, the new is juxtaposed against the old brick surfaces of the warehouse. The result is an interplay of open and closed areas, old and new materials and geometric shapes.

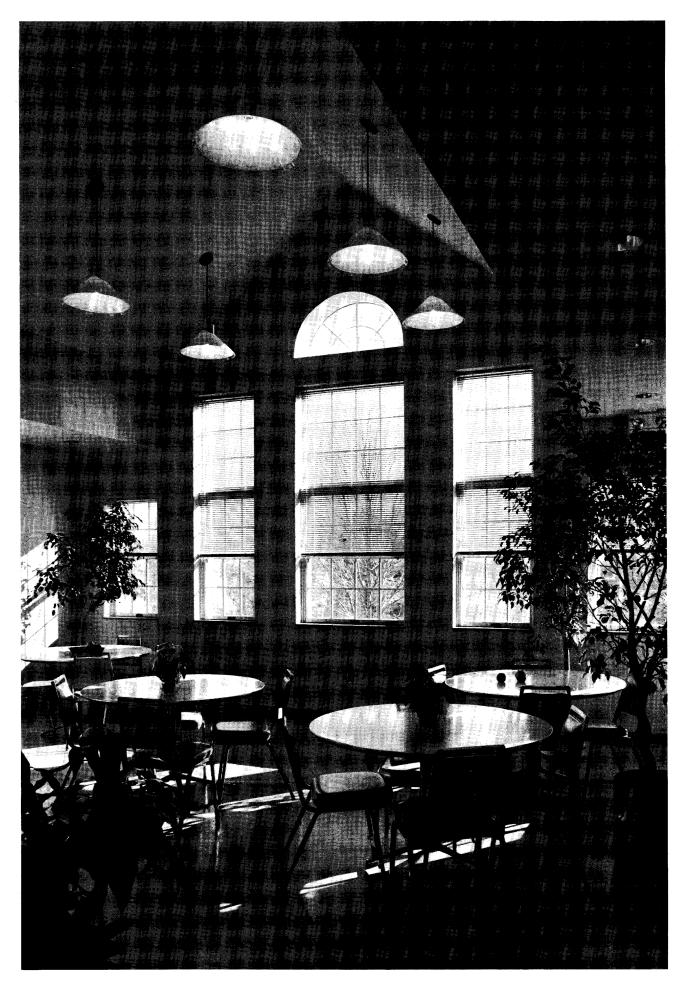
Bringing natural light into the structure was a challenge. Its existing windows were small, and building codes prohibited adding new ones. So, at the center of the living space, over the raised study, the architects installed a cupola skylight that lets light into all the other spaces. And at the entrances, adding a residential quality to the warehouse, the designers installed fully glazed patio doors.

In downtown Asheville, J.E. Samsel Architects combined two brick buildings that provide retail spaces at the street level and upscale housing on the upper levels. Built in 1987 as apartments, the 14 units at 60 Haywood are now being marketed as condominiums by City Assets Corp., the developer.

The units range from 960 square feet for a one-bedroom unit to 2,500 for a three-bedroom penthouse. For efficiency, the apartments were designed to use the depth of the building, with one unit on the street side and one on the parking side. That arrangement resulted in larger than usual one-bedroom units.

A 10-foot wide alley permitted windows on three sides of one building. The other long wall butted up against the courtyard of an adjacent project, so Samsel added windows there as

Right: A Winston-Salem shelter for battered women is composed of new and old spaces, including this new, brightly lit cafeteria. Photo by Bernard Carpenter.



Why have the pyramids remained one of the world's greatest wonders?

Because they were built with the same quality and dedication that go into every Miller project.

No Wonder!



Raleigh, NC (919) 782-1004

Wilmington, NC (919) 256-2613

Builder and General Contractor Since 1949.



This cozy lounge was fashioned for the Battered Women's Shelter from what once was an open porch in a building designed as a home for incurables.

Photo by Bernard Carpenter.

well. On-site parking and a controlled secure entry offered prospective tenants security.

In the end, Samsel said, the project demonstrated that people would pay a premium to live in downtown apartments. But it did not prove financially rewarding for the developers, in part because the developers couldn't take advantage of rehabilitation tax credits when the tax law changed after the project was underway.

"There's a demand for upscale downtown housing," Samsel said. "But there needs to be some help. If local governments are interested, they need to provide market incentives to get housing built to a critical mass."

Shelter from Life's Blows

Shelters for women and children forced from home by violence are typically makeshift places, spruced up with donated paint and voluntary labor.



221 Providence Road Eastowne Office Park Chapel Hill, NC 27514

601 South Cedar Street Suite 101 Charlotte, NC 28202

919/929-0481 Chapel Hill 919/489-4789 Durham 704/332-0181 Charlotte

■ PLANNING ■ CIVIL ENGINEERING ■ SURVEYING ■ STRUCTURAL ENGINEERING

Battered Women's Shelter

Winston-Salem

Architect: Walter Robbs Callahan & Pierce Architects, PA, Winston-Salem Client: Family Services Inc., Winston-Salem General Contractor: Wilson-Covington Construction Co., Winston-Salem Structural/Civil Engineering: Sutton-Kennerly & Associates, Greensboro Mechanical/Electrical Engineering: William G. Robinson Jr., Winston-Salem Cost Estimator: Harris & Associates, Greenville. SC

In Winston-Salem, Walter Robbs Callahan and Pierce Architects PA, has turned what once was an institution for the terminally ill into a temporary home where women and children may gain self-respect and get a fresh start on life.

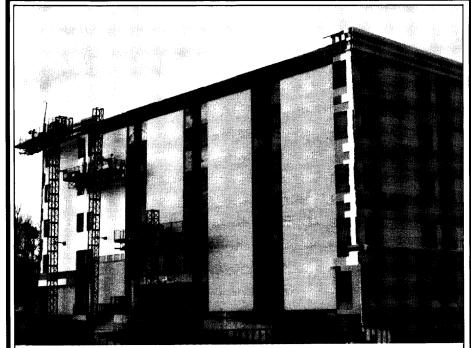
The building opened in 1929 as the Junior League Hospital for the Incurable, designed to humanely house the chronically ill and infirm—the aged no one else would take in. Sixty years later, Family Services Inc. began a \$1.1 million rehabilitation so the building once again could shelter those with no place else to go—battered women and their children.

The 11,220-square-foot building, which was already in use as a shelter before the renovation began, had fallen into disrepair. More like a hospital than a home, the upper level had tiny rooms along a corridor. The lower floor housed administration areas, lounges and a kitchen.

The architects removed a deteriorated porch from the front entry and rebuilt two-story porches at either end of the building, turning one into heated lounges on each level. Inside, they gutted the building, leaving only the floor structures and columns. Then, using both floors, they designed 18 spacious rooms that can be linked as suites as needed to accommodate large families.

A new, 6,000-square-foot administrative wing houses the dining room, kitchen, children's playroom, night manager's room, group conference room and offices.

Security was a key element in the rehabilitation. All exterior entrances to the dormitory itself were converted to emergency exits; access is now through the administrative wing, where consoles monitor the hallways and exits.



Park View Office Building, Park Road and Fairview Road, Charlotte, NC Architect: Clark Tribble Harris & Li

Applicator/Contractor: J.C. Beacham Plastering Company

We are proud to announce the completion of another Dryvit® renovation project.

Behind this building stands the Dryvit reputation for a quality construction product, Outsulation[®].

For over 30 years, Dryvit exterior wall insulation and finish system has brought energy efficiency and a handsome appearance to over 65,000 buildings, here and in Europe.

For more information on the Dryvit Outsulation system contact:

W. FRED CASEY & COMPANY

Distributors and Representatives
P.O. Box 2272 • Charlotte, NC 28247 • 704/541-1611



E.J. BROWN & ASSOCIATES

Professional Construction Estimators/Construction Managers

Specializing in Feasibility Studies, Preliminary Budgets, Conceptual Cost Estimates, Quantity Surveys, Detailed Cost Estimates, Value Analysis and Construction Management. Also offering CACES and CES Formats.

American Society of Profes. Estimators Construction Spec Institute American Assoc. Cost Engineers Professional Const. Est. Assoc. Society of American Value Engineers Eddie J. Brown, C.P.E. 815 Old Winston Rd. P.O. Box 746 Kernersville, NC 27285 Tel. (919) 996-3791

The Legacy of Henry Kamphoefner

wo years ago, Herbert McKim of Wilmington gathered together the class of 1950, the first graduates of the school of architecture that Henry Kamphoefner built at North Carolina State University.

Kamphoefner's wife Mabel C. Franchere Kamphoefner, who had recently died, had amassed a mountain of memorabilia and awards from her husband's life and work. So McKim and his classmates arranged with archivists at N.C. State to collect the material in book form. They presented the handsome leatherbound volumes in Raleigh during a weekend that wound up with cocktails at Kamphoefner's home.

"When we left his house, we said, 'You meant so much to us and made us what we are," "McKim said. "He said, 'That's not so. It's you who made me what I am.' '

That comment, McKim and others who knew Kamphoefner would agree, was uncharacteristically modest for the godfather of architecture education in North Carolina.

Henry L. Kamphoefner died at the

age of 82 on Feb. 14, after suffering a heart attack. From 1948, when he arrived in Raleigh from Oklahoma to start a school of architecture and throughout his 10 years of retirement. Kamphoefner was unflinchingly outspoken, often controversial and sometimes cantankerous. Few who passed his way were unaffected.

"He was a man of vision, and he arrived at the right time in history." McKim said. "He was bold enough to say what needed to be said, and he did that—in clear, precise terms."

"Henry, with his leadership, propelled that school to national attention," said John Thompson, a Durham architect and immediate past president of the NCAIA.

Thompson said Kamphoefner's demands for excellence put terror in students' hearts, while his enthusiasm for his subject filled them with the joy. But even though the dean inspired awe, he was not aloof. As a student. Thompson was severely strapped for money. Somehow, Kamphoefner found out and "handed me a \$50 bill in passing in the hallway."

"Henry Kamphoefner, no question in my mind, was one of the foremost architectural educators in the United States of his generation." said Robert Burns, an alumnus and now chairman of the N.C. State design school's architecture department. "Perhaps the most creative dean of architecture schools."

Kamphoefner was the second educator—and first administrator—to win the Topaz Award, given for lifetime achievement in architectural education by the American Institute of Architects and the Association of Collegiate Schools of Architecture.

His principal contribution, Burns said, was "the ability to create a highly innovative, experimental school in an area like North Carolina, where the groundwork had not been laid. He started from scratch. He had a wonderful knack for attracting to the school brilliant, creative educators in architecture. In many cases, they did go on to become nationally and internationally prominent."

Among them were Matthew Nowicki, who helped design the United Nations complex; Eduardo Catalano, who moved on to MIT; author and architectural critic Lewis Mumsford: and Buckminster Fuller, who-before he was well-known—spent a month in residence during each of the school's first several years.

"Henry used to boast that he supplied more faculty members to other schools of architecture than any other dean," Burns said.

Kamphoefner's design work also won recognition. The Grandview Music Pavilion in Sioux City, Iowa. was chosen as one of America's Outstanding Buildings of the Post War Period by the Royal Institute of British Architects.

As part of his legacy, Kamphoefner worked with the NCAIA to establish a foundation to recognize a sustained contribution to excellence in modern architecture. The first Kamphoefner Prize was awarded in 1988 to J.N. Pease of Charlotte. When no winner was selected in 1989, Kemphoefner decided that when no prize was awarded, the money would be used for two traveling fellowships for students of architecture.

D岸LIMITS

The American Institute of Architects

National Convention and Design Exposition

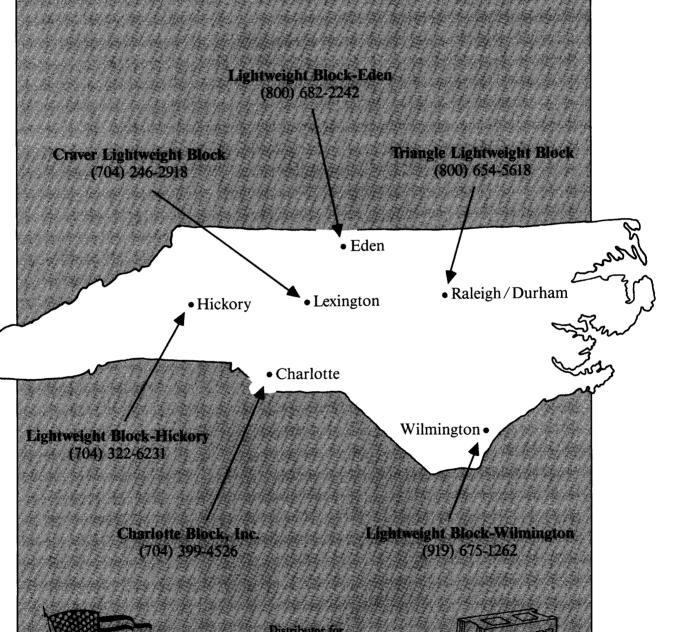
Houston May 19-22, 1990

The Construction Specifications Institute, Raleigh-Durham Chapter, will host its Fourth Annual Products and Service Fair on Monday, May 14, from 4:00 p.m. to 9:00 p.m. The Fair will take place at the Omni-Durham Hotel and Convention Center. The Raleigh and Durham Sections of NCAIA will be participating in the show with a mini-seminar of general interest. Mark this date on your calendar and look for more information in the NCAIA April/May Newsletter.

Solite Block Division

With six convenient North Carolina locations to serve you.

• Custom Shapes and Colors • Engineers on Staff
100% Pure Solite Masonry Units



"Just a Block to you, But a Reputation to us."

PICTURE PERFECT: Architectural Photographers At Work



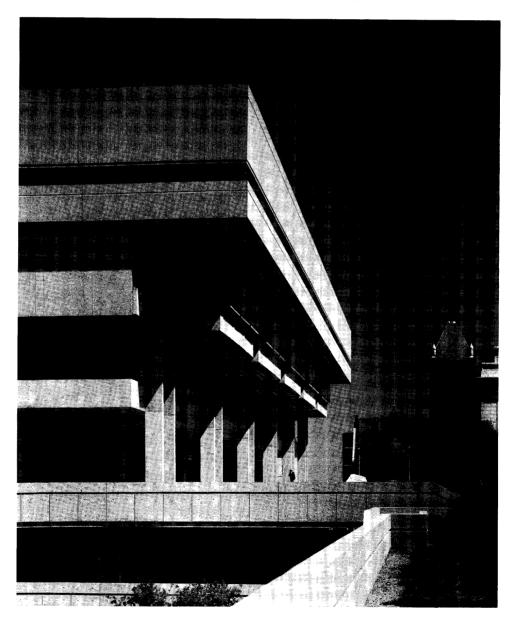
In 1963, when Gordon H. Schenck Jr. started his architectural photography business in Charlotte, his chief competitor was a New York architectural photographer who roamed the Eastern Seaboard. At that time, a national organization of architectural photographers listed only 25 members in the entire United States-and none in the Southeast.

Schenck is still shooting buildings in North Carolina and beyond, but his competition has increased manyfold. Today, he thinks, North Carolina may have a higher ratio of architectural photographers per architect than any other state.

The shooters say there's plenty of work to go around. Not only is the state in a lively growth spurt, but it's also a good central location for taking advantage of the Sunbelt boom.

The prospects have encouraged other photographers to add architecture to their list of specialties. But not all shooters who take pictures of buildings are architectural photographers, and the proof is often obvious in the results. An architectural photographer uses different equipment and hones different skills. He or she knows how to keep tall buildings from leaning over backwards, control perspective, track the light, find the angles that show the building at its

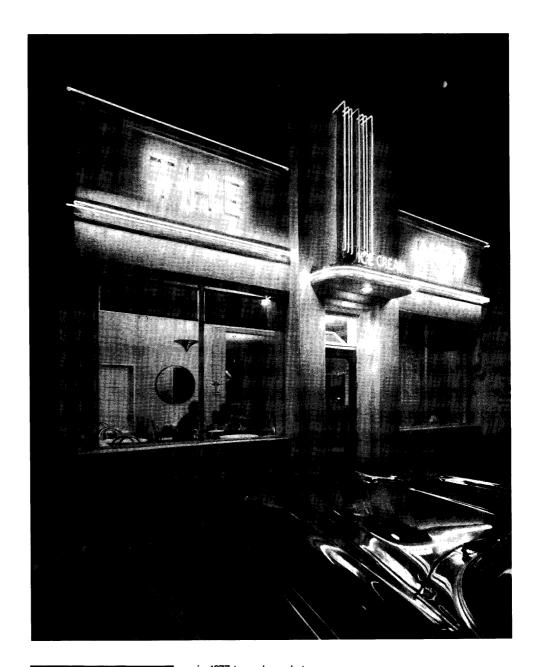
most dynamic and engaging. Several have had some training in architecture. Here's a look at the work of 9 North Carolina photographers who make it their business to put our buildings in the best light.



Gordon H. Schenck Jr. 1317 Harding Place Charlotte 28235 (704) 332-4078

Studied architecture and received an engineering degree from N.C. State University (1950). Worked 13 years as civil engineer with Southern Railway; started own architectural photography business in 1963. Won awards from the North and South Carolina AIA Chapters, was granted Photographic Craftsman degree (1984) from the Professional Photographers of America. Has taught architectural photography at Winona School of International Photography, Chicago, for 10 years. A member of The Light Factory, the Guild of Charlotte Artists, several national photographers associations and is officer of Architectural Photographers Association.

When I met Eduardo Catalano, the architect for the Greensboro/ Guilford County Government Complex (left), he was lying on the pavement in the plaza soaking up Southern sunshine, something he had in mind with the design, and had already been asked to move by a policeman. After a day of shooting, we went to a restaurant that insisted he wear a tie, which he didn't want to do. A resourceful waitress stuck a red napkin in his collar. The next day, I found this shot combining complementary shapes of the courthouse and a church. It was his favorite. He called it "that shot vou found after I left." 4×5 view camera, Tri-X film, 90mm lens.



J. Weiland
Fine Photography
147 Webb Cove Road
Asheville 28804
(704) 252-3093

A photographer since his early teens, studied architecture at Tulane University in New Orleans but math courses convinced him his forte was photographing buildings, not designing them. Worked in several studios in Atlanta. Came to North Carolina

in 1977 to work as photographer with *Mother Earth News*.

Opened his own studio in 1980.

Serves clients in Western North Carolina, throughout the state and elsewhere.

We had planned to hose down the pavement in front of this converted service station to get reflections of the sign. But a black '57 Chevy, whose driver and his date were eating ice cream inside, offered an opportunity too good to pass up. 4×5 Vericolor Professional Film, Type L; 75mm wide angle Dagor lens.

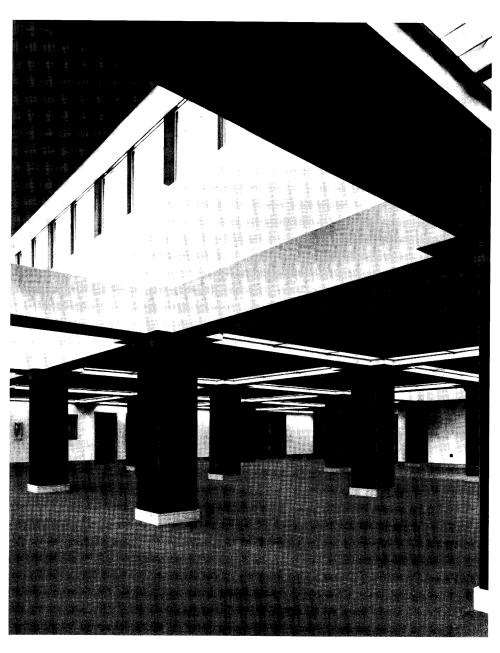
Greg Loflin
The Loflin Group
P.O. Box 18643
Greensboro 27419-8643
(919) 272-4275

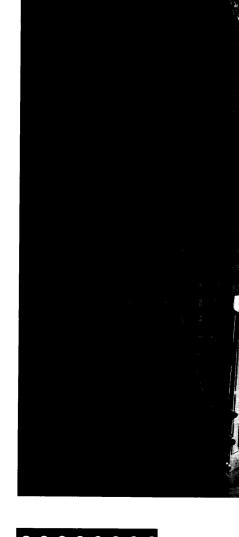
Studied photography and photofinishing at Randolph Community College; worked with Rick Alexander & Associates, 1982 to 1983; formed own company, 1984. Interest in architecture stems from working heavy construction several

years before college. Newest interest is in computer graphics. The company is computerized and is keeping up with the technology to incorporate electronic imaging, along with still work.

Just as we arrived to shoot the unfurnished space in the N.C. Department of Transportation building in Raleigh, so did the movers. The moving company refused to wait—time was money. So we bought time by

locking the only entrance from the elevator side of the building. Finally, the movers agreed to stack furniture in a corner until we finished. But soon the corner was full, and we weren't quite done. So we used the locked door trick once more, then made a quick exit down the stairs. I like this photograph for the depth and movement, the wide range of tones, surfaces and light sources. Fuji Daylight 100. Exposure, 8 seconds at f/32.





JoAnn Sieburg-Baker 902 Henley Place Charlotte 28207 (704) 342-3909

In 1971, armed with a degree in English, went to work as a trainee in a photo lab, doing all the printing and assisting photographers in the studio and on location. In 1973, took job as office manager of the *News and Observer* photo lab in Raleigh, where she shot assignments studiously avoided by regular staff—Pet of the Week and studio head shots—and tagged along with photographers on assignment. For five years, photographed



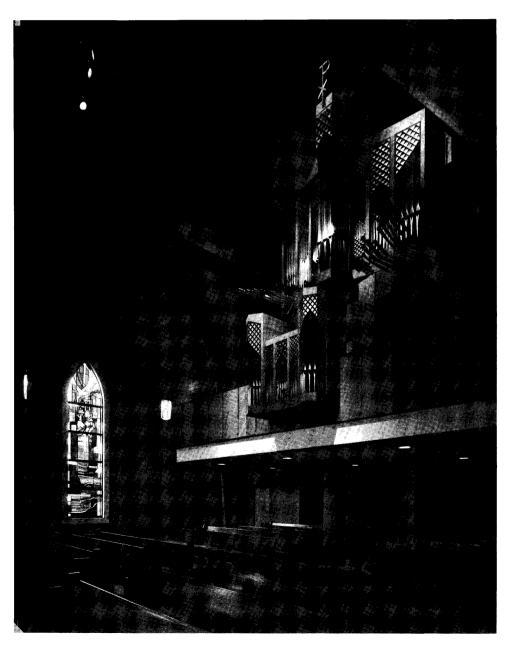
Joseph Ciarlante
Ciarlante Photography
1415 South Church Street
Charlotte 28203
(704) 333-5916

Has a BFA from the Tyler School of Art at Temple University (1979), an MFA from The School of the Art Institute of Chicago (1981) and completed an Architectural Photography Seminar at Harvard's Graduate School of Design (summer 1988). Worked as an assistant to an architectural photographer in Chicago who emphasized a fanatic attention to detail and light. As a result, has developed a specialty in interior lighting. Teaches photography at UNCC and at The Light Factory in Charlotte.

I like shooting church interiors because they're so diverse in architecture, size and use of materials, and great care has usually been taken with the lighting. It gets so quiet while I make these long exposures, and I just sit and watch the light. I worked with a low exposure index/dilute developer combination that allows me to extend the contrast range of the film to 10 or 11 stops—meaning I can take Plus X which has an ASA of 125 and rate it around 12, while diluting the film developer about 1:4. The over-exposure brings out the details in the shadows and the dilute developer subdues the highlights.

historic buildings for N.C. Department of Cultural Resources. Left in 1980 to work briefly for Gordon Schenck in Charlotte and then started own business in 1981. In 1987, opened a studio to broaden income base with studio work and non-architectural location work.

This is from a series on Victorian houses in North Carolina. The project was funded by a grant from the Z. Smith Reynolds Foundation, and the result was a book called Grand Old Ladies, published by Eastwoods Press in Charlotte. This photo is one of two I have in "A Celebration of Photography," a current exhibit at the Mint Museum in Charlotte commemorating the 150th anniversary of photography.







After three years running a commercial studio in Raleigh, moved to New York in 1980 and worked with Arnold Newman, a renowned portrait photographer. Shot, among other famous people, a group of architects for *Town & Country* that included Richard Meier, Ulrich Franzen, Philip Johnson, Robert Stern, Der Scut, Edward L. Barnes and Paul Rudolph.

While in New York, photographed Raleigh architect
Norma Burns and began to shift focus from the people to the buildings they designed.
Then returned to Raleigh. In shooting buildings, will sometimes step outside the strictures of how to behave with a camera, such as letting perspective take a back seat to impact.

This photograph of the Chatham County Social Service Building by Burnstudio Architects PA was an attempt to capture some of the experiential qualities of the building, as well as document the detailing. It falls under the heading "don't forget to look up." Ambient light was used, and the scene was photographed with a Hasselblad Super-Wide C.

Get the Picture-Instantly

While most architectural photography focuses on the end result of an architect's work, the use of instant photography *throughout* a project can bridge the distance between the site and the drawing board.

Beginning with the first meetings with clients and vendors, instant photographs clarify visual issues, eliminating guesswork and confusion.

For site recording, instant photos capture adjacent structures, landscape and other features needed to establish context. Taping together staggered shots gives a comprehensive, panoramic perspective.

And the photos can capture detail as well, especially useful, for example, in compiling a visual record of moldings or columns in renovation projects. If a scale ruler is laid against the subject at the site, other measurements can be determined from the photograph back at the office.

If the first picture doesn't do the job, you can see it immediately and take another on the spot. And when you need only a handful of images, using up an entire roll of 35mm film is neither expedient nor economical.

In the design process, instant photos can be enlarged on copy machines, letting architects note additions and alterations directly on the copy paper. Polaroid Corp.'s ProPak System has an optional half-tone screen kit that makes photocopies of black and white photos sharp and detailed.

Instant photos can be converted into digital form for use in CAD systems, desktop publishing and other computer imaging applications.

Once digitized, the image can be enhanced, rotated, enlarged and otherwise manipulated. It then can be printed, forwarded and faxed.

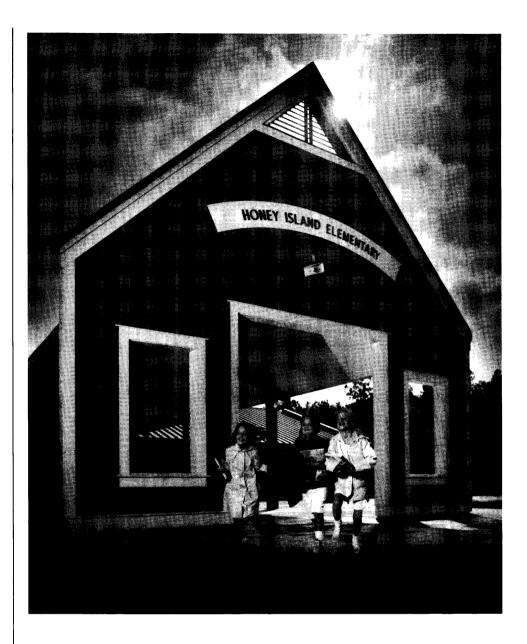
During construction, instant photos are a valuable documentation tool. Photographs of footings, beams and other conditions substantiate and clarify written description. When liability questions arise, a picture is powerful evidence. It's one thing to report the incorrect installation of a drain pipe, another to furnish photographic proof.

Instant photos are also effective presentation tools, helping model builders and putting the models themselves in the best light. It's possible even to produce an artistic picture of the project by putting several sheets of paper over an instant photo and heating it with a warm iron until the emulsion is soft and malleable. The chemicals can be manipulated with a plastic stick, knitting needles, inkless pen or similar tool to mix the color and blur the edges. The result: an instant photo that looks like a surrealistic oil painting.

Information supplied by Polaroid Corp. (617) 577-2000



In an architect's office, instant photos help visually communicate important information quickly and efficiently.



Marcus Lamkin P.O. Box 51982 Durham 27717 (919) 490-2018

Started out in college trying to fulfill expectations that he would follow in his architect father's footsteps, but math sent him running to sociology. After graduation, worked everywhere from a jellybean factory in New Jersey to a green bean factory in Washington. Then went to

the University of Missouri for a degree in photojournalism. Worked for newspapers and journalism, until the influence of his childhood years, when his father dragged him to building sites, won out. Investing in medium and large format equipment, he turned to architectural photography, his specialty for 10 years in Louisiana. Last year, spurred by a slow Louisiana economy, moved to North Carolina.

The practical nature of school design and budget limitations

involved are a challenge for the architect. The architect of this project added a creative touch by designing an "old school house" facade at the loading and unloading drive. The facade alone did not seem enough, so I added some kids. The children gave the design scale and added life. I used two umbrellaed strobes to light the facade and the children to balance the sunlight rising over the top of the peaked roof.

Jim Sink Artech Inc. 5540 McNeely Drive Raleigh 27612 (919) 787-9153

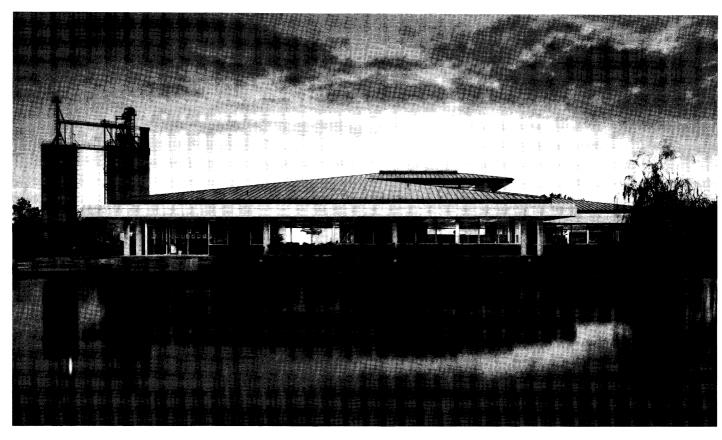
First architectural shoot was of the Huntington Beach Fishing Pier in Southern California. He was 15, visiting a friend, using an old Kodak box camera from the war, spending every cent on film, getting totally hooked on photography. Joined the Naval Air Reserve after high school and headed for the Naval School of Photography in Pensacola, Fla. The reputation of the Randolph Tech photography program in Asheboro lured him from native Tidewater Virginia to North Carolina. There he focused on architectural photography and has been doing it for 17 years. Constantly challenged by the

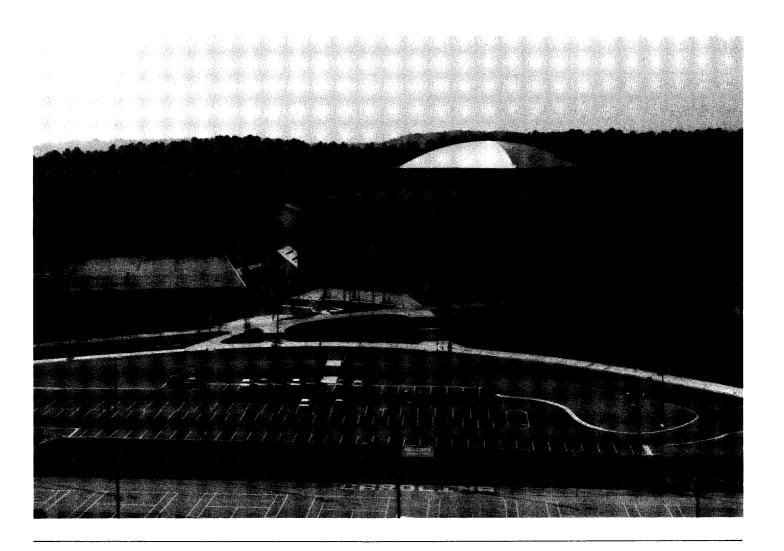
vagaries of the weather, he is especially fond of dusk and night shots.

I had been shooting at Goldsboro Milling for Bartholomew Associates of Raleigh the entire day. As I left the building around 7 p.m. and walked to the parking lot with all my equipment, I happened to look back at the building across a surrounding lake. The sun was setting, the interior lights were glowing and I had only two sheets of 4×5 film left. I quickly set up my Sinar 4×5 camera and exposed one sheet of film at f/16 for 8 seconds. I didn't even take a meter reading. At that time of day, I sometimes just feel the exposure. That's something no one can teach you. Jerry Blow
Architectural Photography
P.O. Box 11626
Raleigh 27604
(919) 834-3836

Followed his father's dream into engineering, instead of his own into architecture. The good part was spending four years with Thomas Jefferson's prize work, the University of Virginia, and then eight years with the Defense Department in Washington, D.C.'s unique assemblage of structures. During that time, he studied photography at the Smithsonian and later, architectural photography at Harvard Graduate School of Design. Being an architectural photographer with a background in engineering seems like a good blend of what both he and his father wanted.

This view of the Dean Smith Center on the UNC campus brings back chilly memories. We had spent a couple of days photographing the complex for the architects and I was anxious to get a shot of the building with the landscape in context. The bad part about that was that I wanted an early morning light and it was mid-November. The next morning, I questioned my sanity as I inched along an icy roof of a dormitory that provided an excellent vantage point. The sun wasn't quite over the horizon yet and the wind was from the North. But as we got used to it. I saw that the shape of the dome repeated the shape of a distant hill very nicelv.





A Whirlybird's Eye View

When Michael Van Staagen is out flying his model helicopter, he often attracts a lot of attention.

"A lot of police officers come up and take a look," Van Staagen said.

If the curious constables knew his chopper carried a 35mm camera with a wide-angle lens, they might suspect him of secret surveillance. Although his mission is a bit revolutionary, it's not at all clandestine. He is taking aerial shots of buildings for architects.

Van Staagen, 22, synthesized his hobby and his profession while working on his architecture degree at N.C. State University. When he saw other hobbyists strapping small disc and 110mm cameras onto model airplanes, he realized he could upgrade the equipment and turn out good aerial architectural photographs.

"I've always had an entrepreneurial instinct," Van Staagen said. "I designed the mounting system, how to adjust it and how to fire the camera from the servo, the on-board mechanism that moves things."

Since he completed his degree in December, Van Staagen has been taking aerial photographs and doing free-lance architectural work in Greenville, where he lives. He plans to return to N.C. State for a graduate degree in architecture.

Aerial photographs offer the architect or client a three-dimensional view of an entire building. They also place a building or cluster of buildings in context on the site. But the cost of an aerial photograph

taken from a real flying machine is often prohibitive.

Van Staagen can take aerial shots for much less—about \$125 a shoot—because he can shoot a roll of pictures in about 10 minutes and be reasonably sure he'll get one or two good frames. What's more, the model helicopter doesn't have to follow FAA rules on flying altitudes and can get a lot closer to the subject—close enough to get the entire facade, rather than just the roof.

Van Staagen's model helicopter, sans camera, is made of aluminum and plastic and weighs 13.5 pounds. It climbs at the rate of about 10 feet per second and moves forward at up to 50 miles per hour. It carries 10 ounces of methanol, enough fuel for a 10-minute flight.

The rigged helicopter is worth about \$2,000—\$1,500 for the model

GUSTOM BRICK CO.

"SERVING RALEIGH, THE TRIANGLE and EASTERN NORTH CAROLINA"

VISIT OUR SHOWROOM COMPLETE DISPLAY OF SAMPLES

PRODUCTS

FACE BRICK HAND-MADE BRICK GLAZED BRICK PAVERS

SUPPLIERS

Lee · Taylor Clay · Boren Isenhour · Nash · Pine Hall Old Virginia · Bickerstaff Palmetto · Cherokee Sanford Richtex · Hanley · Glen-Gery Merry · Delta-Macon · Ashe General Shale · Lynchburg Cunningham · Lawrenceville

1613 Old Louisburg Rd. Raleigh, N.C. 27604 P.O. Box 6579, Raleigh, NC 27628 (919) 832-2804 • 1 (800) 543-1866



An aerial view of Highland Green Apartments in Raleigh, one of the first Michael Van Staagen took using the specially rigged model helicopter he designed.

and \$500 in camera equipment. Van Staagen might fly any of his four other helicopters when they aren't in tiptop condition, or he might risk them in some aerial acrobatics. But not the shooter. Van Staagen flies it VERY carefully.

Van Staagen has been flying the models for more than five years, mastering the tricky balancing act that keeps the model going where he wants it to go. He's learned to calculate intuitively its altitude and position.

On one architectural shoot, Van Staagen had to take off in a parking lot, fly the model over 70-foot trees that surrounded his subject, bring the model down again on the other side, aim and shoot at a building he couldn't even see.

"An ideal situation is the subject having an open field in front of it, and a calm, sunny day, with the angle of the sun just right," Van Staagen said. "That hasn't come up as often as I'd like it to."

Michael Van Staagen can be reached at 1507 E. Wright Road, Greenville, N.C. 27858, (919) 830-3617.

OBrienAtkins

Architecture

Engineering

Landscape Architecture/ Planning

Interior Design

Post Office Box 12037 Research Triangle Park, NC 27709 919/941-9000

Harris & Associates

Estimating & Scheduling 1601 Cedar Lane Road Centre West, Suite 15 Greenville, SC 29611

(803) 246-8040

We specialize in CACES estimating for Corps of Engineers and CES for Naval Facilities Engineering Command.



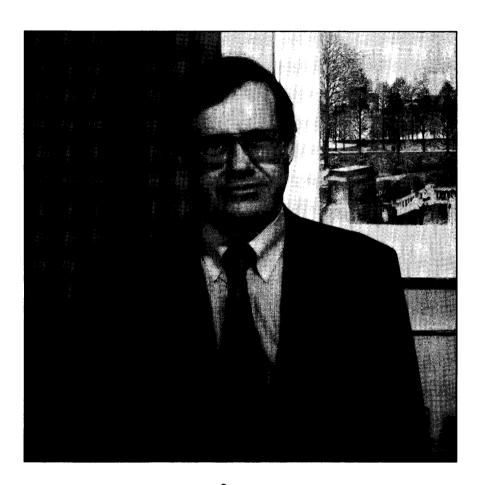
Estimates are available on computerized format upon request.

whole lot easier at night knowing that DPIC is there for us. Until we became acquainted three years ago, we didn't realize just how vulnerable architectural firms were or how devastating a single claim could be. We certainly didn't realize the difference an insurer could have in our continued success.

Protecting our 20-year investment in this business and the livelihood of our 25 employees has always been a foremost objective of Dellinger Lee Nichols Architecture, but rather than resting on our laurels of continued success, we now have a more realistic approach to new projects.

The greatest benefit DPIC offers us is their knowledge and quick, personal service. When Stuart Thomas of Professional Liability Consultants in High Point called on us three years ago, DPIC made an exceptionally thorough evaluation of our firm before issuing any policy. They asked questions we had overlooked ourselves. At that point, we knew we weren't dealing with just any insurer. And since then, they have continued to evaluate all our written contracts so we can avoid complications down the road.

As far as we're concerned, DPIC is changing the way the insurance industry does business. They've caused us to have greater expectations, but, more importantly, a healthier attitude toward professional liability. Now we think in terms of loss prevention, which benefits us as well as our clients. It's a comfort zone we never had before. **



When I am

Don Lee is a principal in Dellinger Lee Nichols, a firm founded in 1969. He is past president of NCAIA. We value our relationship with his firm and appreciate his willingness to talk to you about us.



164 South Main Street Post Office Box 6475 High Point, North Carolina 27262 1-800-768-4590



ELEVATIONS

On the Shoulders of Giants

By Milton W. Grenfell

Milton W. Grenfel, AIA, has practiced architecture since 1977 and founded Grenfell Architecture in Charlotte in 1986. With a master of architecture degree from Washington University in St. Louis. Grenfell continued to pursue his education in classical architecture as a research assistant on a



Renaissance church in Mantua, Italy; traveling and studying architecture on a tour of Europe; and studying in Philadelphia under a Master of Classical Architecture on a grant awarded from Classical America. In addition to his work on commercial and residential buildings in Charlotte and beyond, Grenfell has taught architectural history, is a frequent contributor of articles to newspapers and magazines and serves on the Historic Properties Commission.

 $oldsymbol{\mathsf{L}}$ here is an architecture being practiced today that is neither Modern, nor Post Modern. It is an architecture that might best be called "Modern Traditional."

Modern Traditional architecture is an architecture of the present which encompasses the past. It is fashioned from contemporary life patterns, economies and building technology, but it learns from and maintains continuity with our 5,000-year architectural heritage.

Modern architecture rejects this heritage. Post Modern views it with irony. Modern Traditional regards it with piety. This piety is not churchiness, but "fidelity to natural obligations." When Virgil called the hero of his epic "pious Aeneas," he didn't mean a man who spent a lot of time in the church. He described a man respectful of his culture, who carried away from sacked Troy the traditions from which to fashion a new nation that would become Rome.

In just such a manner, our ancestors in this New World built a wooden Colonial Georgian architecture in pious continuance of the brick and stone Georgian of their native land. Until 50 years ago, the architecture in this nation was fashioned from the exigencies of local climate and building technologies but was manifested through the inherited traditions of Western architecture.

The piety of Modern Traditionalism has two elements. The first is an acknowledgment that generations of architects before us built great and beautiful buildings. That presents us with "a natural obligation" to seriously and closely study their work—not in a couple of semesters of architectural history but as a vital ongoing part of the daily practice of architecture.

Before we draw a window, we must consult windows

throughout history. What aesthetic principles, problems, technical issues embodied in these windows are applicable to our window? The investigation ranges across printed volumes, personal sketchbooks, existing buildings and the vast files of memory. Moreover, a certain synergyboth within the office and with the client—becomes possible in a conversation focused on the common knowledge of buildings from our shared culture.

The justification for such reference (might we say reverence?) is that generations of architects have wrestled with questions similar to those confronting us today. As the adage goes, if we can see further than others, it is because we stand on the shoulders of the giants who have gone before. By building within a tradition, one realizes the power of a fourth dimensional, or temporal, synergy. Recognizing that time is less linear and more metaphysical than we once believed, we can bring together past and present in a way that is more Einsteinian than Newtonian. Ironically, the by-now-tired cries of Modernists for an "architecture of our time" are hopelessly out of step with the true nature of our time.

The second element of Modern Traditionalism is about community. Among the lay complaints about traditional Modern architecture are that it is alienating, often incomprehensible and quickly dated. As Tom Wolfe argues in From Bauhaus to Our House, Modern architecture springs from a predominantly European intellectual, elitist, utopian idealogy which was, over several decades, shoved down the throat of the public. That the dogma was not swallowed is evident in the preservation movement. which in effect has said that an old building-any old building—is preferable to what will replace it. The public has quite rightly perceived a diminished quality in Modernist buildings, saying, "They don't build 'em like they used to." And it is alienated from an architecture that has produced a numbing succession of idiosyncratic personal expressions of, for and by an "educated" elite.

Modern Traditionalism rejects the egocentric, elitist thrust of traditional Modernism. In a spirit of humility, it embraces a more communal architecture. Modern Traditionalism is an opportunity for our profession to once again do buildings that people like and understandbuildings not just of our time but for all time.

Share your thoughts on subjects architectural or remotely related. Send manuscripts (800 words or less), your photograph and a brief biography to North Carolina Architecture, AIA Tower, 115 W. Morgan St., Raleigh, NC 27601.



Piedmont Natural Gas is the warm-up act for every show at the new Charlotte Coliseum. And it makes sense, because only one thing is up to the challenge of heating 465,000 square feet under a 120-foot ceiling.

Natural gas. It's the efficient way to warm up your clients. For technical information and free assistance call toll free. NC: 1-800-532-0462. SC: 1-800-438-8410. Charlotte: 364-3120.



We Changed The Name Of The Heat Pump. Because The Heat Pump Has Changed.



When it comes to home heating preferences in the '90s, changes are in the air. Because each month, more than 7,000 Carolina families choose to heat and cool with today's high efficiency heat pump, The Comfort Machine.®

And why not? When installed to our specifications by an authorized dealer, The Comfort Machine comes with a Comfort Guarantee. Which says that, if your customers aren't comfortable anytime during the first year, we'll install the system of their choice. Free.

There's also a pleasant change in the budget. In fact, an independent engineering firm has found that, in two homes alike except for their heating systems, The Comfort Machine cost 20% less to operate all winter long than a high efficiency gas furnace. We'll send you the independent study at your request.

The Comfort Machine saves builders money, too. It's much easier to install than a gas furnace, requires no venting and provides far greater flexibility of placement.

For the complete facts on The Comfort Machine, call a Duke Power Marketing Consultant, today.

And build-in what Carolinians are buying.

*Registered Trademark of Duke Power

OFF THE **DRAWING BOARD**

AWARDS AND RECOGNITION

The 1989 Design Awards of the Charlotte section of the NCAIA honored four Charlotte firms for projects designed or constructed between September 1985 and September 1989. Three Honor Awards went to:

• J.N. Pease Associates for the Charlotte-Mecklenburg Government Center, a 400,000-square-foot complex on a 60-acre track of urban renewal land, which opened in the fall of 1988.



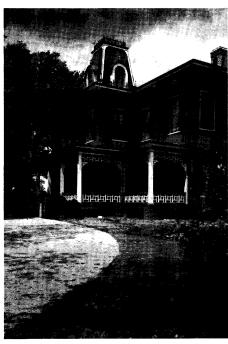
Charlotte-Mecklenburg Government Center. J.N. Pease

Brooks Hall Rotunda Renovation, NCSU. Odell Associates Inc.



- Odell Associates Inc. for the Brooks Hall Rotunda Renovation at North Carolina State University in Raleigh, a renovation occupied by the School of Design in 1989.
- Dellinger Lee Nichols for the design (unbuilt) of Temple Israel, Charlotte, a sanctuary with administrative wing, children's center and small chapel to be sited on Shalom Park, a community campus. Two Merit Awards went to:
- Yelverton/Architect PA for Corporate Guest Quarters Renovation, Fort Mill, S.C., a project that turned the founder's Italianate house and caretaker's cottage into a quest facility for visiting executives.
- Odell Associates for the design of the Turfdome, a multi-use domed stadium for Paris, France (unbuilt), that would provide a naturally-lighted, natural turf playing field with lower level seating on a platform that can be raised or lowered as needed.

Corporate Guest Quarters, Fort Mill, S.C. Yelverton/Architect PA



The North Hills branch of First Union National Bank in Raleigh, designed by Little & Associates Architects of Charlotte, was chosen for the Community Appearance Honor Roll for 1989. The Honor Roll recognizes commercial establishments that improve the appearance of their neighborhood and the city.

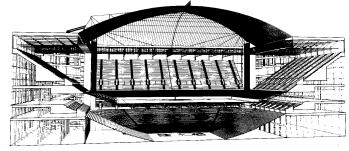
The Cherokee Sanford Group Showroom, a project of Camas Associates of Charlotte, was selected by Architectural Business magazine as Reconstruction Project of the Year.

Calloway Johnson Moore, P.A., received an Award of Honor in the 1989 Architectural Brick Design Awards for the design of Performance Place, a multi-theatre complex on the campus of the N.C. School of the Arts in Winston-Salem.

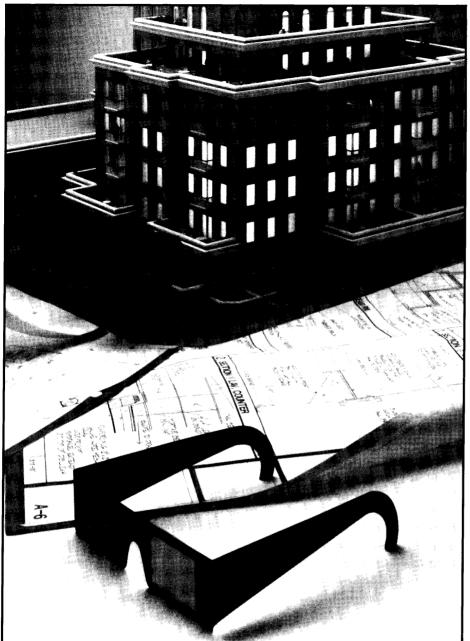
P. Michael West, AIA, a principal of Calloway Johnson Moore, P.A., and



Temple Israel, Charlotte. Dellinger Lee Nichols



Turfdome, Paris, France, Odell Associates Inc.



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

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.

SCALE Model Ôfsich

100 S. Harrington St. Raleigh, NC 27603 919/832-4304 Thomas H. Hughes, AIA, of Thomas H. Hughes & Associates, received an Award of Merit in the 1989 Architectural Brick Design Awards for the design of the Newton Pool House in Winston-Salem. The awards are sponsored by the N.C. Brick Association to recognize outstanding architectural brick design.

IN THE WORKS

Little & Associates Architects of Charlotte has recently completed the design of two office buildings, the NCNB office building, a 75,000-square-foot building in downtown High Point, and AirPark East Office Building "C," a six-story, 140,000-square-foot office building to be built on I-40 between Winston-Salem and Greensboro. The firm also designed for the University of North Carolina at Charlotte a three-story facility consisting of 46 apartment-style units, 59 suite-style units and two resident hall director units.

The U.S. headquarters of the Swiss-based Max Daetwyler Corp., designed by Jenkins-Peer Architects, is scheduled for completion in June. The facility is just north of Charlotte at Huntersville Business Park. Construction is underway for a branch of First Charlotte Bank designed by Jenkins-Peer for the new Arboretum development in Charlotte.

Haskins, Rice, Savage & Pearce, P.A., of Raleigh, was selected by Raychem Corp. to design a 100,000-square-foot expansion of its Fuquay-Varina facility, to include office, laboratory and manufacturing. Construction is to begin the summer of 1990, with completion scheduled for the fall of 1991.

Camas Associates of Charlotte has completed the architectural and interior design of the Charlotte offices of KPMG/Peat Marwick, an accounting firm. The offices are located on three floors of Two First Union Building.

Reinhardt-Elder Architects, P.A., of Charlotte has been selected in four Charlotte projects: the interior upfit for Si! Italian Restaurant & Bar in Charlotte; Fairmarket Square, a 60-unit multifamily housing project for Crosland Properties; the exterior renovation of Life Insurance services Inc. Office Building; and Newman Manor Townhouses, a six-unit townhouse project.

Clark Tribble Harris & Li was selected as architect by Faison Associates for the 400,000-square-foot Dominion Tower office building in Roanoke, Va.; by CMD Southeast, Inc., for two buildings—60,000 square feet and 40,000 square feet—on the Meridian Business Campus near Durham; by The Trinity Group for the 60,000-square-foot mixed use Boardwalk development in Spartanburg, S.C.; as design consultant by Waters, Inc. for the 62,000-square-foot CentrePort Building in Greensboro; as architect by Belwest/Rock Hill Partnership for the 52,000-square-foot building in Tech Park in Rock Hill, S.C.

O'Brien/Atkins Associates of Research Triangle Park has been selected by the Research Triangle Institute to design a wet-chemistry laboratory of 40,000 to 50,000 square feet, which will be the 17th building on the 158-acre RTI campus.

Burnstudio Architects, PA, of Raleigh will design for the University of North Carolina at Chapel Hill a Student Recreation Center, a 27,000-square-foot state-of-the-art fitness center, with facilities for aerobic dance, weight training and support services.

Ramsay Associates, Inc., Architects, has been picked by the State of North Carolina to provide design services for the interior and exterior renovation and rehabilitation of the Roundhouse Complex at the Historic Spencer Shops.

Snowdon and Associates, P.A., of Laurinburg has been selected by the N.C. Department of Crime Control and Public Safety to design the new Troop H Headquarters Building in Monroe. The firm also will design a physical education facility for Scotland High School and renovations and additions to the Scotland County Courthouse and Jail in Laurinburg.

NAMES AND CHANGES IN NORTH CAROLINA ARCHITECTURE

Michael R. Tye, AIA, has formed Tye Architecture Group, with offices at 924 Country Club Drive, High Point, offering services in architecture, interior design and planning. Tye was formerly president of RS&H of North Carolina in Greensboro and has 25 years of experience in commercial, residential and institutional projects with RS&H, Odell Associates and J.N. Pease. He is a past president of the NCAIA and is on its long-range planning committee. In 1988, he was appointed to a five-year term on the North Carolina Board of Architecture.

Two Raleigh architectural firms have merged to form a new firm, McKimmon Edwards Shawcroft Associates, with offices at 4601 Lake Boone Trail in Raleigh. The principals are James M. Edwards III and Brian Shawcroft, with Arthur McKimmon, a senior member of the firm. acting as full-time consultant. McKimmon, with over 40 years experience, planned and designed Peace College and residences in the Raleigh area. Edwards' designs include the Shearon Harris Energy and Environment Center, the Angus Barn Restaurant and the Springmoor Life Care Community. Shawcroft, who designed offices in London and Toronto, has practiced architecture in North Carolina for 25 years. His work includes schools in Wake and Franklin counties, and Gaddy Goodwin Teaching Theatre for Raleigh Little Theatre.

Larry Walters and Jim Gleeson have opened Walters Gleeson Architects, P.A., a firm for architecture and planning, at 601 South Cedar St., Suite 205, Charlotte.



Noise And Vibration Control Specialists

Let us assist you with the potential noise and vibration problems on your future and existing projects.

No fees on most jobs.

SOUTHERN KINETICS, INC.

We make a sound difference.

Charlotte, NC (704) 552-9400

5214 Western Blvd. Raleigh, NC 27606 (919) 851-4185 5127 Virginia Beach Blvd. Norfolk, VA 23502 (804) 461-1135 Columbia, SC (803) 256-6364



THE MOST EXCLUSIVE CLUB IN THE WORLD—
YOUR OWN LEISURE PAVILION

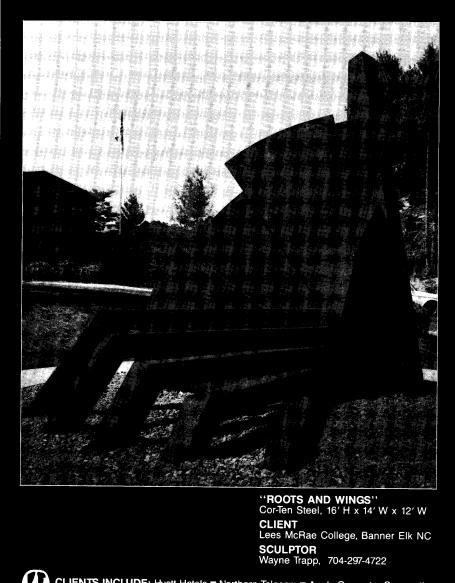
Distributor for IBG Solar Structures

CAROLINA SOLAR STRUCTURES

A Division of Bob Thompson Builders, Inc. Box 9325, Asheville, NC 28802

(704) 298-7171





CLIENTS INCLUDE: Hyatt Hotels ■ Northern Telecom ■ Apple Computer Corporation Georgia Pacific ■ New York Times ■ Steel Case Corporation ■ Allenton & Associates NC Central University ■ Lees McRae College ■ Tennessee Valley Authority ■ AT&T Sheraton Hotels ■ Battelle Memorial Institute ■ USX Corporation ■ City of Columbus Ohio Watauga Savings & Loan ■ The Mint Museum ■ Midrex Corporation ■ Central Carolina Bank Mayfield School District ■ Armco Steel ■ R.J. Reynolds International ■ The Hunter Museum Ray Killian & Associates ■ Ohio State University ■ Calvin Hefner Interiors ■ Honey and Associates ■ Humanna Corporation ■ Lindsay Henderson Interiors ■ St. Lawrence College Kron Medical Company ■ G.T.E



E & 0 LIABILITY

CONSULTANTS, INC.

ARCHITECTS AND ENGINEERS ARE OUR ONLY BUSINESS 1310 East Wendover Ave. Post Office Box 13150 Greensboro, NC 27415

800-868-2050 919-333-2050 Fax: 919-275-2636

CAROL HIATT **JACK WELCH**

> INSURANCE FOR TODAY'S PROFESSIONAL

Carl W. Smith, formerly of Carl W. Smith Architects, and John Hitch, formerly of Hitch, Architects, have merged their firms with and become principals in The Smith Sinnett Associates, P.A., of Raleigh. Carl Smith is in charge of construction administration and John Hitch is over design and CAD operations.

The firm of Wilber Kendrick Workman and Warren of Charlotte has officially changed its name to WKWW, Inc., to reflect a day-to-day working change made some time ago.

Howard C. Hunter Jr., AIA, former senior associate at Clark Tribble Harris & Li, has formed a new architectural office. Howell Hunter & Associates, P.O. Box 410383, Charlotte, N.C. 28241.

John W. Kinney Jr., AIA, formerly of O'Brien/Atkins Associates, has formed A/E/C Support services, a consulting firm for architects, engineers and other professionals in the design and construction industry. with emphasis on systems installations in professional offices. Other services include historic preservation consulting, code training workshops, design reviews for code compliance, and other professional specialties. Kinney has more than 20 years experience in architectural practice, including four years as consulting architect to the N.C. Division of Archives and His-

America's Competitive Edge... American Workers.

To find out how your company can better tap this valuable resource, write:



Elizabeth Dole Secretary of Labor U.S. Department of Labor Room N-5419 Washington, DC 20210

tory, and for 10 years, he was responsible for systems development at O'Brien/Atkins. A/E/C Support services is located at 116 N. Bloodworth St., Raleigh.

Linda Sanders, associate professor of architecture at the North Carolina State University School of Design, has been elected to the National Architectural Accreditation Board as one of three educational representatives. Over the next three years, Sanders will chair visits to schools seeking reaccreditation. Last year, she completed a two-year term as national treasurer of the Association of Collegiate Schools of Architecture and is currently a visiting professor at the College of Architecture at the University of Arizona in Tucson

Daniel C. Wells has joined the Raleigh office of Ramsay Associates, Inc., Architects, as project coordinator with primary responsibility for commercial interiors.

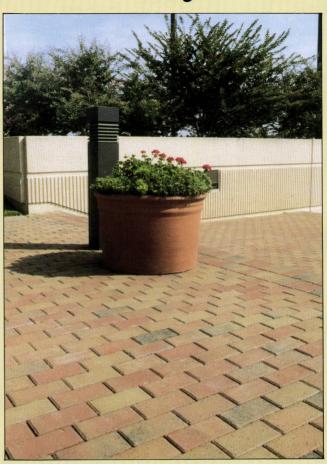
PDA, a Raleigh firm, has named Marjorie L. Acker an architect in its architectural services division. Acker holds a bachelor degree in environmental design in architecture and a master of architecture from N.C. State University School of Design. She previously served as project manager at Smith Sinnett Associates, P.A., and was an architect and vice president at Team Architects, Inc.

Peterson Associates, p.a., of Charlotte has opened an office in Richmond, Va. The new office is headed by W.C. "Chuck" Means, AIA, a vice president with the firm. A native of Charlotte, Means received his master of architecture from the College of Architecture Health Facilities Studio at Clemson University. Thomas J. Monaghan, P.E., has joined the Charlotte office of the firm as director of electrical engineering. Monaghan has relocated from the Roanoke, Va., area.

Thomas A. Dwyer, AIA, has joined the staff of Odell Associates as director of operations in North Carolina. Dwyer formerly was director of architecture for the Indianapolis office of HNTB. Dwyer has more than 25 years of experience with educational and health care facilities. Dwyer holds a bachelor of architecture degree from the University of Notre Dame and attended an executive master's degree program in business administration at Indiana University in Bloomington.

O'Brien/Atkins Associates has added two new principals: Dudley B. Lacy, AIA, vice president of project management, and John M. Fish, AIA, vice president of the landscape architecture/planning group. Lacy is responsible for Wake County Public Safety Center, George Watts Hill Alumni Center at UNC-Chapel Hill and Glaxo, Inc. He has a master in architecture from the University of Pennsylvania, a bachelor in architecture from UNC-Charlotte and a bachelor of arts degree from Duke University. Fish, who joined the firm in 1986, designed sections of the N.C. Zoological Park and a master plan for Durham's old American Tobacco complex. He has a master degree in landscape architecture from the University of Virginia and a bachelor of arts from the University of Richmond.

Pave it with Imagination!





CONCRETE INTERLOCKING PAVING STONES THE ORIGINAL. THE BEST. TM

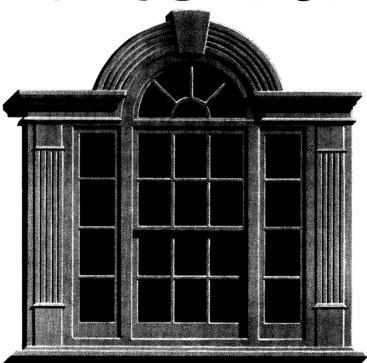
Decorative, durable, maintenance-free and economical, versatile Uni paving stones are available in a variety of shapes and colors. Add the beauty and elegance of Uni pavers to your patio, driveway, garden or pool deck today.

For all your concrete needs, call the leader in concrete products.



Spartanburg, SC 800/476-2607 Greenville, SC 800/868-3266 Anderson, SC 800/476-2603 Rock Hill, SC 800/476-2606 Asheville, NC 800/422-5625 Charlotte, NC 800/476-2604

Our Windows Express Your Point Of View.



Finely Crafted Custom Millwork

Each window we custom make expresses its designer's point of view, particularly in quality and detail. You'll find that same old-world craftsmanship in all our custom millwork, including doors, mantles, and stairs. We also carry Therma-Tru doors and Hurd windows, two of the finest manufactured components available today.

For the quality you may have thought was gone for good, until now, contact Carolina Components in Raleigh 919-850-8200, Charlotte 704-821-6850 or Greensboro 919-294-6660.



Locations in: Raleigh • Greensboro • Charlotte • Richmond • Newport News • Greenville • Columbia Martin Bardsley Anthony, Architects, of Shelby have added John K. Boal and Robert B. Johnson Jr. as principals and changed the name of the firm to Martin Boal Anthony & Johnson, Architects. Boal graduated from N.C. State University and received a master of architecture degree from Kansas State University. Johnson, a native of Wilmington, received a master of architecture degree at the University of Illinois.

Hakan/Corley & Associates, Inc., of Chapel Hill has added **Dan Rogers**, a registered architect, to its professional staff. Rogers received his bachelor of arts degree in architecture from UNC-Charlotte in 1977.

Douglas M. Brinkley, AIA, has been named a principal in the firm of Haskins, Rice, Savage & Pearce, P.A. Brinkley, who has been with the firm since 1986, is a 1974 graduate of the N.C. State University School of Design and an appointed member to the National American Institute of Architects Committee for Education. As project architect, he has been responsible for many projects throughout the state.

Fayma Nye has joined The FWA Group as project architect in the Charlotte office. She previously was project manager with Hager Smith & Huffman Group, PA, of Raleigh. She holds a bachelor of environmental design in architecture.

Michael C. Berry and Collier B. Webb of The FWA Group were named project architects after passing the North Carolina Architectural Registration Board exam. Webb and Berry are both based in the firm's Charlotte headquarters. Webb, who has a bachelor of architecture degree from Auburn University, joined the firm in 1985. Berry, a graduate of the University of Virginia, has a bachelor's and a master's degree of architecture and has been with the firm since 1988.

Eric W. Lee, AIA, and Robert H. Moody, AIA, have been named principals of Foy and Lee Associates, P.A., of Waynesville. Both have been with the firm for more than 10 years.

Jerry W. Currie, AIA, has been named a principal in the firm of McCulloch England Associates Architects of Charlotte. Currie work has focused on health care, but he also has worked on commercial, educational and church projects. He was elected to the firm's board of directors in 1988.

Robert P. Cain has joined McCulloch England Associates Architects as project architect.

H.M. (Mac) Nance Jr. has been named director of construction administration for Haskins, Rice, Savage & Pearce, P.A. Nance, a 1967 Civil Engineering graduate of N.C. State University, joined the firm in 1986.

Snowdon and Associates, P.A. Architecture, has named **Richard R. Pierce**, AIA, a principal of the firm. Pierce has a bachelor and masters degree in architecture from N.C. State University. He joined the firm in 1987.

Malcolm E. Bates has joined Peterson

WITH PROVEN PERFORMANCE



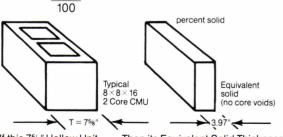


In Controlled Laboratory Testing.

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. = $\underline{T} \times \underline{Ps}$



If this 75%" Hollow Unit has 52% solid material Then its Equivalent Solid Thickness is $\frac{7.62"\times52}{100}=3.97"$ (2 Hour Rated)

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



CONSTRUCTION CONSULTANTS

R. E. Crabtree & Associates supplies technical support services for construction projects throughout the Southeast. Call us today for:

Conceptual & quantity estimates Construction feasibility review Justification estimates Value engineering Arbitration & litigation services

Scheduling
Full & part time monitoring
Dispute resolution assistance
Claims analysis & preparation
Contract preparation & review

919/783-5691

919/783-5692

Fax 919/783-7053

R. E. C R A B T R E E & A S S O C I A T E S, I N C.

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 1-800-688-1845 in North Carolina.



JOHNSON & HIGGINS CAROLINAS, INC. 1 First Union Center, Suite 3900 Charlotte, NC 28202 (704) 374-1845

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

Associates of Charlotte as director of business development.

Stephen L. Freyaldenhoven has joined Calloway Johnson Moore, P.A., in Winston-Salem. He received his bachelor of architecture from the University of Arizona.

Robert H. Moody, AIA, and Eric W. Lee, AIA, have joined Tai Y. Lee and Henry B. Foy as principals of Foy & Lee Associates, P.A., of Waynesville.

Bobby W. Patterson, AIA, has been named an associate of Hines-Northup-Ersoy Architects/Engineers/Planners in Winston-Salem. Patterson is a graduate of the UNC-Charlotte College of Architecture. He joined the firm in 1986.

Charlotte S. Hayworth has joined the firm of Stec & Company, P.A., Architects, in Greensboro as interior design director. She has a bachelor in interior design from East Carolina University and a certificate in construction estimating from Guilford Technical Community College.

Kevin B. Oldland and David E. Gall, AIA, have joined Thomas H. Hughes and Associates Architecture in Winston-Salem.

William C. Johnson, AIA, has joined Bohm-NBBJ of N.C., Inc., as project manager. He is an architecture graduate of Louisiana State University.



Two For One

Revox of Switzerland has introduced stereo sound from a single loud-speaker system. The Duetto is a triangular prism-shaped speaker with sides of about 14 inches that not only produces left and right stereo channels but also creates full three-dimensional sound. This is accomplished by two sets of three drivers in opposite sides of the triangular-shaped cabinet. The drivers are acoustically coupled to each other, building a stereo matrix.

The Duetto can be placed on the floor or suspended from the ceiling. It is ideal for concealed positions behind furniture or cabinetry. It was designed to be used with a subwoofer, such as the Revox Power cub amplified subwoofer or passive Piccolo Bass subwoofer, which supply very low frequencies.

The Duetto/subwoofer combination can be used as a primary or extension loudspeaker system, as well as for surround sound applications or enhancing the sound from stereo television receivers and video equipment.

For more information, contact Revox Division, Studer Revox America, Inc., 1425 Elm Hill Pike, Nashville, TN 37210 or call (615) 254-5651.



Ashley Furniture Industries
Southern Furniture Market Showroom
High Point, North Carolina



LUCKSTONE PORTFOLIO SERIES

When their 14,000-square-foot Show-room 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 custom-curved 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.





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





KeyStone® 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