

Wisconsin Society of Architects  
May/June 1992

# W I S C O N S I N

*Architect*

Residential Architecture

Interior Architecture

Landscape Architecture

AIA LIBRARY & ARCHIVES  
1735 New York Ave., N.W.  
Washington, D.C. 20006

SEP 1992

1004



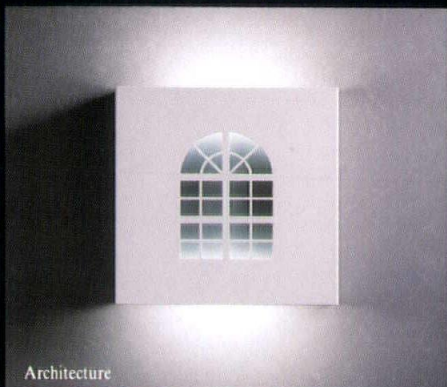
V

I

S

A

Consider the Possibilities.™

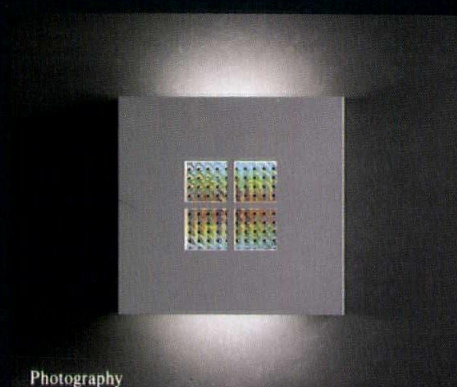


Architecture



Technology

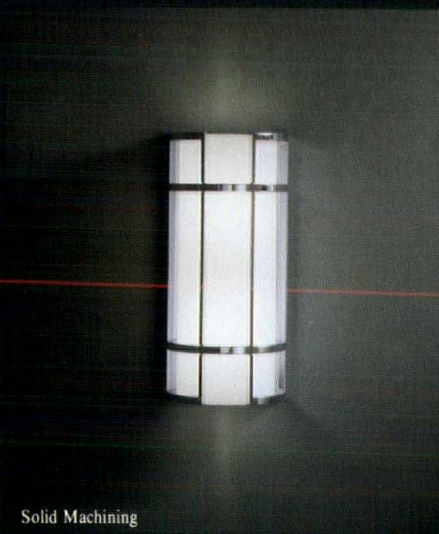
PATENTS PENDING



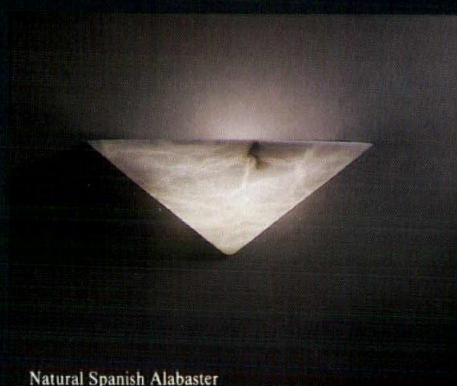
Photography



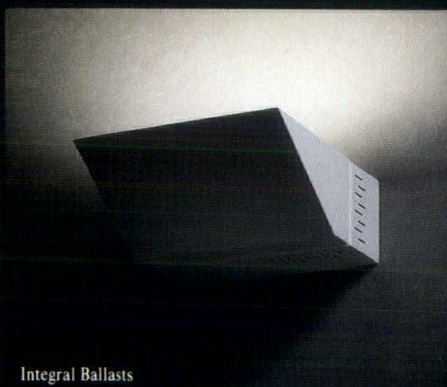
Honest Materials



Solid Machining



Natural Spanish Alabaster

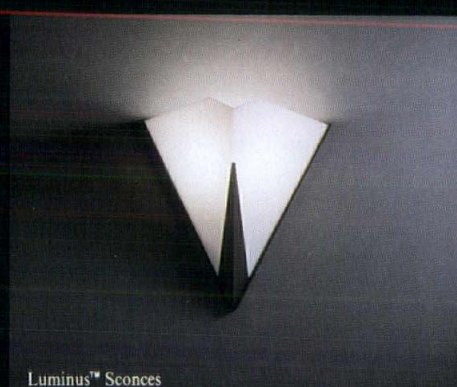


Integral Ballasts

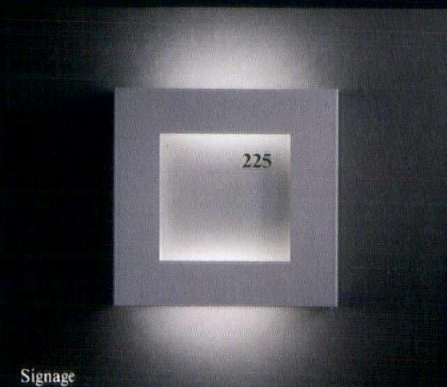


Performance

PATENTS PENDING



Luminus™ Sconces



Signage



Art Sconce™ Collection

■ VISA LIGHTING CORPORATION 8600 W. Bradley Rd. Milwaukee, WI 53224  
Specifier Hotline 1-800-788-VISA or FAX 414-354-7436

An Oldenburg Group Company

---

# We've put thousands of people to work for you.

At Wisconsin Bell, our employees make it their business to help make your business run smoothly.

That's why we do everything we can to make sure our public phones are hassle-free.

When you qualify as a Wisconsin Bell public telephone agent, every one of our phones comes with a team of people who want to be your personal communications specialists. People who work hard to handle all the details.

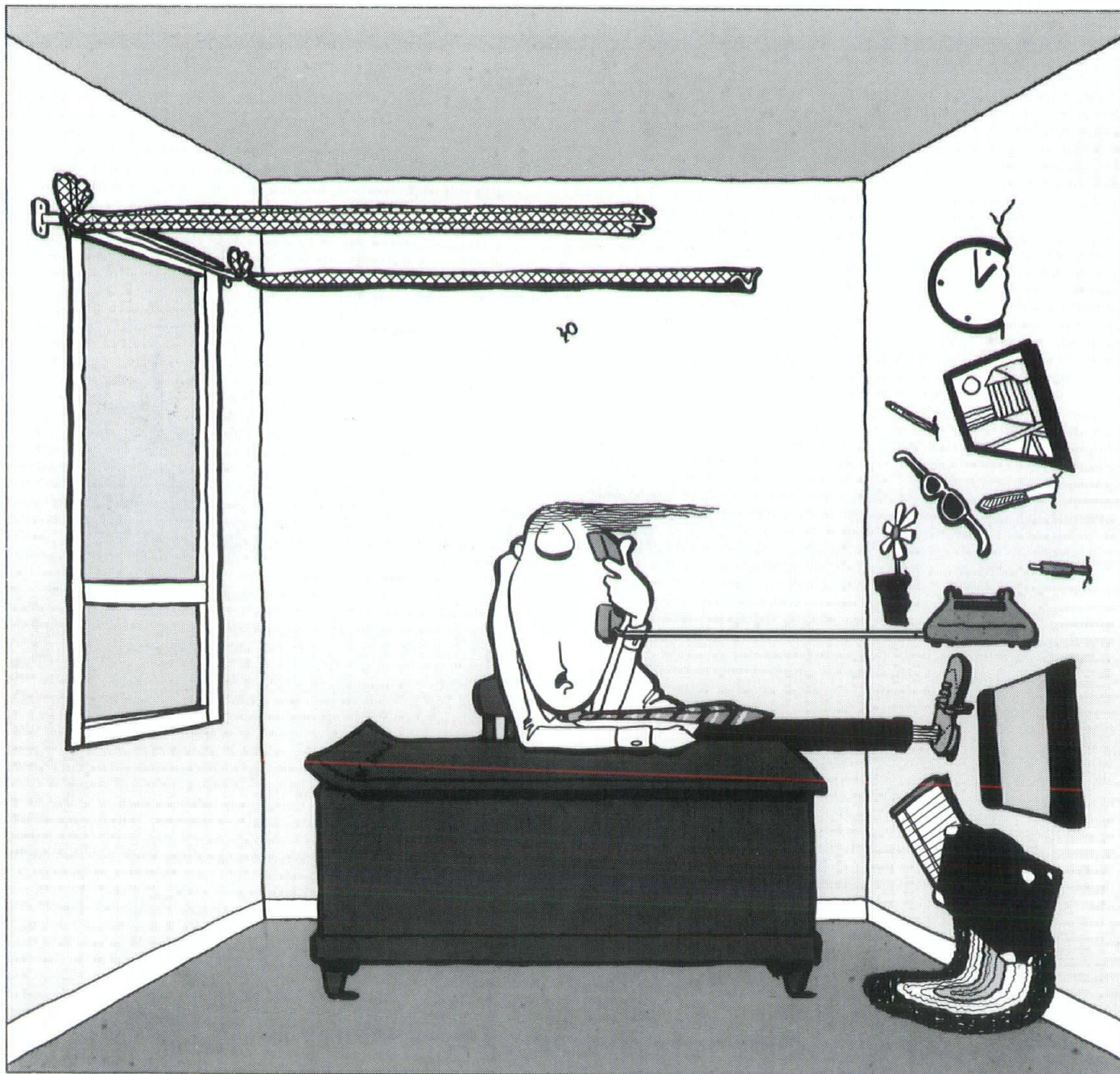


From routine maintenance and lost coin refunds to free repair service.

In fact we put so much time, thought and effort into your operation, you can almost forget our phones are there. Until one of our customers becomes one of yours.

Wisconsin Bell. Our kind of support is a real advantage.

For more information about Wisconsin Bell public telephones, call 1-800-924-2772.



*"Hello . . . Gettemup Construction? I'd like to speak to the gentleman who 'saved me a couple bucks' on caulking, please . . ."*

The corners you cut to squeeze out a little extra profit can be the very things that cost you more down the road. And not just in time and material.

S & S Sales knows that! G.E. Silicones perform better and longer, gun easier and faster in

all weather conditions, and eliminate the need for primers in most cases. You save time and money in the long run and the short run. You also save your reputation.

Call the experts at S & S Sales and find out more about

the new Silglaze II Silicone from General Electric. Do the job right and you'll be called back. For the right reasons.

**S&S  
Sales  
CORPORATION**  
*There is no equal.*

*For your free "SINGLE SOURCE BOOK," call or write:*

S & S Sales Corporation, 12030 West Silver Spring Road, Milwaukee, WI 53225  
1-800-657-0701

# W I S C O N S I N

## Architect

### Features

- 9 Planning the Building for the Site  
*Patrick J. Meehan, AIA, AICP*
- 13 Welcome H.O.M.E., An Unusual New Project Plan  
*Lisa L. Kennedy, AIA, with contributions from Diane Miller*
- 17 Interior Design Winners
- 21 A Garden as an Outdoor Classroom  
*Grace B. Stith*
- 25 A Rainforest Transplanted to Madison  
*Grace B. Stith*

### Projects

- 29 Astor Lyon Rowhouses  
*Engberg Anderson*
- 31 Villa St. Francis  
*Flad & Associates*
- 32 Residential Addition and Remodeling  
*Solner & Associates*
- 33 Horizon House Connection and Renovation  
*Schroeder Piwoni, Inc.*
- 35 New Residence  
*North Design*
- 36 Willo Apartments  
*HGM Architects, Inc.*
- 37 Guest House and Garage  
*Charles J. Quagliana, AIA*
- 39 La Tour Apartments  
*HSR Associates, Inc.*
- 41 Addition to Residence  
*Solner & Associates*

### Departments

- 7 Guidelines
- 42 FYI
- 45 Forum
- 47 Society News
- 52 Marketplace
- 53 Advertiser Index

Cover: Astor Lyon Rowhouses, Milwaukee  
Engberg Anderson  
Photographer: Eric Oxendorf

**Wisconsin Society of Architects Board of Directors:** Roger D. Roslansky, AIA, *President*; Ross T. Potter, AIA, *Vice President/President-Elect*; Lisa L. Kennedy, AIA, *Secretary/Treasurer*; Richard W. Eschner, AIA, *Past President*; Kevin J. Connolly, AIA; Horst W. Lobe, AIA; Daniel J. Becker, AIA; James E. Larson, AIA; Joseph L. Powelka, AIA; Robert E. Shipley, AIA; John W. Sutton, AIA; Walter L. Wilson, AIA; James L. Fryk, AIA; Stan M. Ramaker, AIA; Mark E. Keating, AIA; E. Mitchell Spencer, AIA; Charles H. Western (Associate Representative); Jeff Polachowski (UWM SARUP Student Representative); William M. Babcock, *Executive Director*.

**Wisconsin Society of Architects/AIA:** 321 South Hamilton Street, Madison, Wisconsin 53703—Phone (608) 257-8477.

**Wisconsin Architects Foundation Board of Directors:** 321 S. Hamilton Street, Madison, Wisconsin 53703—Phone (608) 257-8477; Gary V. Zimmerman, AIA, *President*; Orville E. Arnold, *Vice President*; Jack L. Fischer, AIA, *Secretary/Treasurer*; Robert D. Cooper, AIA; Dean Robert C. Greenstreet, Clarence Huettneraich, AIA, FCSI; James T. Potter, AIA; Richard J. Griesse, AIA; Valentine J. Schute, Jr., AIA; William M. Babcock, *Executive Director*.

**North Central Region AIA:** James W. Miller, AIA, *Director*.

**Southwest Wisconsin Chapter:** Robert E. Shipley, AIA, *President*; John W. Sutton, AIA, *Vice President/President-Elect*; A. James Gersich, AIA, *Secretary/Treasurer*.

**Southeast Wisconsin Chapter:** Walter L. Wilson, AIA, *President*; James L. Fryk, AIA, *Vice President/President-Elect*; Daryl J. Dean, AIA, *Secretary/Treasurer*.

**Northwest Wisconsin Chapter:** E. Mitchell Spencer, AIA, *President*; Dennis E. Miller, AIA, *Secretary/Treasurer*.

**Northeast Wisconsin Chapter:** Stan M. Ramaker, AIA, *President*; Mark E. Keating, AIA, *Vice President/President-Elect*; Kevin B. Shumann, AIA, *Secretary/Treasurer*.

**Wisconsin Architect, Inc.; Board of Directors:** Roger D. Roslansky, AIA; Richard W. Eschner, AIA; Ross T. Potter, AIA; Lisa L. Kennedy, AIA.

**Wisconsin Architect Editorial Board:** Peter J. Schuyler, AIA, *Chair*; Dean Robert C. Greenstreet, Douglas C. Ryhn, Nancy J. Hubbard; William M. Babcock, *Chapter Coordinators*; Robert E. Shipley, AIA; Daniel J. Becker, AIA; David G. Peterson, AIA; Dennis L. Olson, AIA.

#### Magazine Staff

**Editor**  
William Babcock

**Coordinating Editor**  
Grace Stith

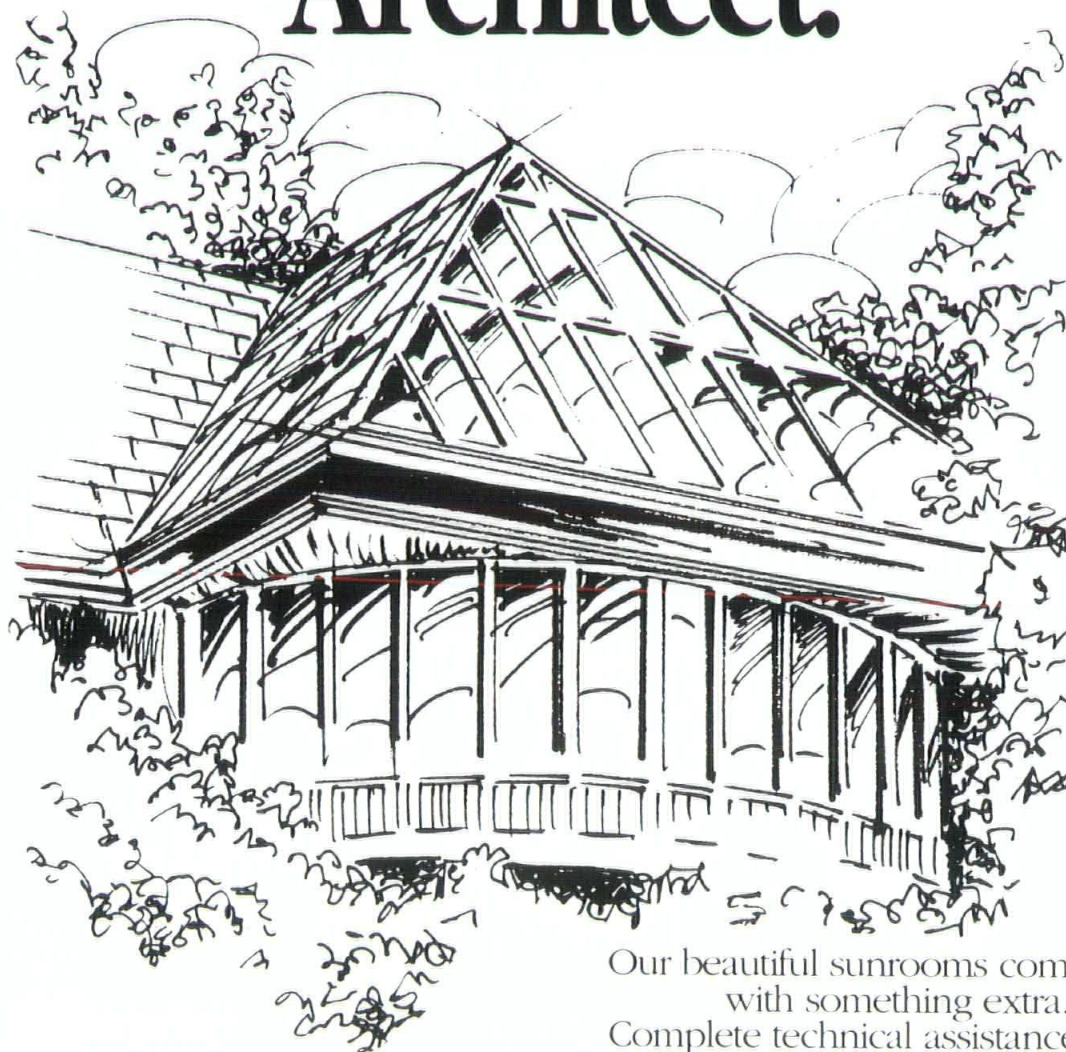
**Advertising & Production Manager**  
Cheryl Seurinck



Printed on recycled paper

**WISCONSIN ARCHITECT** serves the design and construction industry in Wisconsin with circulation to Architects, Engineers, General Contractors, Business and Interior Designers, Landscape Architects, Certified Planners, Developers, Specifiers, Construction Managers, Facilities Managers, Builders, Manufacturers, and Suppliers. Wisconsin Architect is the official publication of the Wisconsin Society of Architects/A.I.A., published by Wisconsin Architect, Inc. Address all editorial and advertising inquiries to: Editor, Wisconsin Architect, 321 S. Hamilton St., Madison, WI 53703; phone 608/257-8477. Wisconsin Architect and the WSA disclaim liability for statements by the editors, contributors, and advertisers.

# Easy on the Eye... Easy on the Architect.



Our beautiful sunrooms come  
with something extra...  
Complete technical assistance.

When you specify our products, we'll give  
you full specifications, detailed drawings,  
design assistance and a wealth of experience.  
And it's all as close as your phone, your fax  
or your overnight mail pickup.



Let's Talk Technical.

We make a great sunroom a great deal  
easier to specify. Call us now. We're easy.

(414) 722-8786

622 Airport Road, Menasha, WI

There has been much attention given lately to the design implications surrounding the Americans with Disabilities Act. There has been much paranoia over the guidelines and the constriction that they will impose on architectural design.

However, not much credence has been given to the fact that designing universally usable environments is just plain good design. The disabled population is not "them," it is part of "us" and more than likely "we"

---

*The disabled population may be "us" as well as "them"*

---

will all be included in that group either temporarily or permanently sometime in our lives. How many of us have met the challenge of negotiating a flight of stairs on crutches? How many of us have searched malls for the remote elevator to transport a

child in a stroller? How many of us have experienced the decreased mobility due to injury, arthritis or just plain old age?

It has always been our responsibility as architects to design accessible environments to meet building codes. Now it is our chance to become more knowledgeable about designing universal environments and to translate that knowledge into good design. Not because it is the law, but because it just makes sense.

Lisa Kennedy, AIA

# SMART MONEY. THE PIVOTAL PART OF ANY NEW CONSTRUCTION PROJECT.

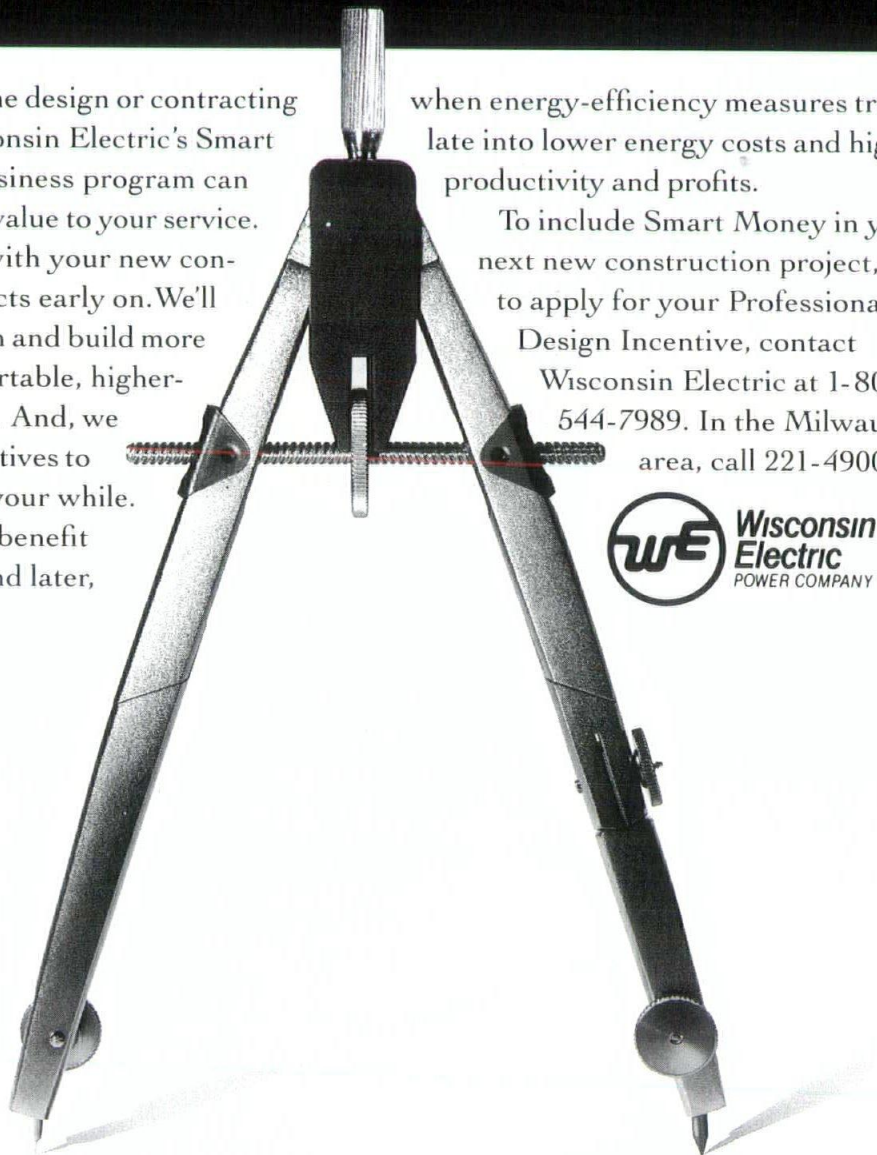
If you're in the design or contracting business, Wisconsin Electric's Smart Money For Business program can provide added value to your service.

Contact us with your new construction projects early on. We'll help you design and build more efficient, comfortable, higher-value facilities. And, we offer cash incentives to make it worth your while.

Your clients benefit immediately, and later,

when energy-efficiency measures translate into lower energy costs and higher productivity and profits.

To include Smart Money in your next new construction project, or to apply for your Professional Design Incentive, contact Wisconsin Electric at 1-800-544-7989. In the Milwaukee area, call 221-4900.



**SMART MONEY FOR BUSINESS PROGRAM**

**CALL 221-4900. OUTSIDE MILWAUKEE, 1-800-544-7989.**

# Planning the Building for the Site

**A**rchitects know that building projects need to be approved by local units of government. Not many architects, however, know that professional land planners can make the project approval process successful and easier. The professional land planner can be an integral part of the architectural project team from prior to program development and building design through the design development phase as well.

The input of professional planners on the project team can, in many cases, not only assure local approval but also a more responsive design for both the client and the community. These factors often result in getting the project through the approval process in a more timely fashion and saving the client money.

The professional planner is experienced in dealing with a multitude of planning interrelationships. Such relationships most often include:

1. Client and community;
2. Land use and transportation;
3. Development and environmental protection;
4. Zoning and the protection of individual property rights; and
5. Community growth impacts and individual clients needs.

The project team's response to these relationships directly affects the project approval.

This article presents some of the areas in which the professional land planner can be used as a critical member of the architectural project team. These areas include building programming, site analysis and physical planning, interpretation of zoning and subdivision regulations and municipal approvals and client representation.

## Building Programming

While the professional planner is typically not an architect, the planner has the analytic tools to forecast and project client needs with a high degree of accuracy. To both the architect and client, client needs translate into the square feet of building and/or site area needed. Knowledge of the total number of square feet needed by the client is crucial in determining building costs and fulfilling those needs.

The use of a planner becomes extremely important when the architect is involved in the construction of municipal buildings. Most often, the expansion of an existing municipal building, or the construction of new buildings, is in direct response to community growth—population, households and various types of land use. Based upon trend analysis, the planner can predict the long-term growth of a variety of community elements which are directly related to the square feet of building needed, project phasing and other long-term client needs.

## Site Analysis and Physical Planning

While not all professional planners are well versed in site and physical planning, many are. The site and physical planning issues considered by the planner usually transcend the realm of merely addressing what occurs on the project's site. Planners also examine such elements as a project's implications on neighboring uses (i.e. bufferyards, landscaping, circulation, on-site automobile queuing, etc.) and intensity impacts (i.e. floor area ratios, traffic volumes, off- and on-street parking demands, etc.) on the neighborhood and community. While the architect may indeed address many of these critical issues as well, the professional planner may address them from a different point of view not previously considered by the architect.

## Interpretation of Zoning and Subdivision Regulations

Professional planners know both the obvious and subtle differences between permitted and conditional uses; among a zoning appeal, variance, beneficial use determination, and an interpretation; between a rezoning and an appeal; and among a building permit, zoning permit, occupancy permit, and conditional or special use permit. Planners know the processes which must be gone through for any of the above mentioned approval and permit procedures and the required level of public input and approval for each. The choice of procedure and the type of approval or permit sought may adversely affect the community's acceptance of the project. Many times a poor choice of procedure

can be avoided by wise decisions regarding which method to select for community approval. Planners have a keen understanding of all of these important issues. Planners also have an understanding about the time implications for project completion relative to each.

Planners know about the composition of municipal plan commissions and zoning boards of appeal. Planners can assist the project team to have an understanding of the true duties of both of these groups under state law. Would an architect recognize abuses of these duties? How are they related to each other and to the municipal legislative board or council? Planners understand these groups and their goals and this can greatly affect project approvals in their early stages.

### **Municipal Approvals and Client Representation**

The planner is aware of all of the nuances of municipal zoning and planning. The planner is aware of how plans and ordinances are written, structured, administered and implemented. The planner is also aware of the implications to clients if such regulations do not exist at all.

The planner knows the crucial interrelationships of the various municipal commissions, boards, departments and their professional staff. The planner deals with all of these elements on a daily basis. Most planners have had field ex-

perience in the actual preparation of such plans and ordinances. While not attorneys, planners are also aware of many of the basic legal implications of municipal regulation of land and development and the decisions of municipalities. This knowledge can be crucial to municipal project approvals and client appeals if projects are not initially approved.

The role of the planner is of particular importance during plan commission review. During my career, I have attended over 1,000 plan commission meetings. At many of these meetings I have witnessed architects going into great detail about the floor plan of a building rather than verbally addressing the concerns of the plan commission—the building's impact and response to community factors. Plan commissions do not care about building floor plans. Plan commissions care about the impacts of a proposed development on the surrounding area and community. These concerns often include the development plan's response to traffic and circulation, landscaping, buffering of adjacent uses, impervious surface and drainage, building bulk and mass, land use intensity, utility service and tax implications. These issues must be addressed in a style and language understandable to municipal officials and in land planning terms.

It is often advisable to address planning issues not only in the verbal and visual format of a presentation, but also in writing so that they can become a part of the project's "official" and "formal" public record. This is very important if approval is not granted and the client decides to litigate the matter.

### **Professional Planning Competence**

What is the mark of documented planning competence? Most professional planners are certified by the American Institute of Certified Planners (AICP). The AICP is the national professional institute of all certified planners. AICP is the professional institute within the American Planning Association (APA). Membership in the APA alone does not qualify one as a certified professional planner. For the planning profession, AICP is analogous to the AIA for the architectural profession. AICP pursues both the certification and professional development of its members as a means to the continuous improvement of planning practice. The AICP sets standards for planning competence, education, planning experience and ethical conduct. A planner certified by AICP has passed a nationally administered examination and has fulfilled designated experience requirements covering the field of planning. **WA**

# We'll Help Fund Energy Efficient Retrofit Studies or Building Design.

Innovative energy efficiency measures, designed into new or expanding facilities, offer long-term benefits. Some of these include lower energy bills, faster equipment payback, increased property value and protection of the environment.

To encourage energy efficiency innovation, Wisconsin Public Service will pay 50% of the cost (up to \$5,000) for design studies which evaluate the value-added benefits that can be achieved by incorporating state-of-the-art efficiency vs. conventional design. Pre-approval is required.

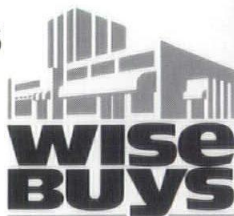
Options which may be evaluated include, but are not limited to:

- Efficient motors and drives
- Lighting and lighting control systems
- Process heat recovery
- Efficient building envelope design
- HVAC efficiency improvements
- Thermal energy storage systems
- Natural gas air conditioning
- Alternate energy systems

All existing and potential retail gas and/or electric commercial and industrial customers of WPS may qualify for funding under the Design Studies program. Contact your local Wisconsin Public Service representative today for more information, or call 414-433-1719.



**Design Studies  
For Business  
And Industry**



# Kalwall -(Kal' - wal)



**NIELSEN BUILDING SYSTEMS**

Racine (414) 681-0676  
Fax (414) 681-1812

Fox Valley (414) 788-6325

Milw. (414) 764-0914

Contact Dale Nielsen for Complete Information  
Kalwall Distributor-Wisconsin/Upper Michigan since 1977  
Guaranteed Quality - Guaranteed Installations

1. Prominence
2. Eminence in architectural design
3. An Architect's best solution to providing the most effective method of illuminating a building with the highest insulation coupled with the creative mix of soft diffused light and controlling heat gain.
4. Cost effective
5. Consistent architectural award winning building material for the entire building envelope.
6. Generic for Quality

## Insurance By Design

Since accurate designs are what your business demands, you should demand insurance that's designed accurately to protect your business. At Klipstein Insurance Services, we've been providing insurance protection for engineers/architects



*Insuring businesses and professionals since 1971.*

since 1978. We also offer other services such as contract review, speeches on loss prevention and in-house risk reducing seminars, to name a few. When you want insurance that's designed for your business, demand the experts. Demand Klipstein Insurance Services.

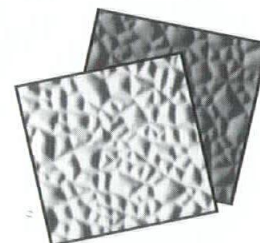


**Klipstein**  
Insurance Services, Inc.

238-7181 • 216 N. Midvale Blvd • Madison, WI 53705  
Paul Berta, Tom Dowling



**BP CHEMICALS**



### TUFLINER® PANEL. THE VERSATILE SOLUTION.

Specify TUFLINER® FRP panel for walls and ceilings when your client needs a product that performs. Manufactured by BP Chemicals/Filon® products, TUFLINER® panel is impact resistant, USDA accepted, easily cleaned and attractive. It's the low maintenance choice in a variety of applications.

- Schools
- Kitchens
- Restaurants
- Corrections
- Restrooms
- Hospitals
- Hotels
- Grocery Stores

**Authorized Distributor:**

**Acoustech**  
Milwaukee, Wisconsin  
1-800-798-4877  
(414) 258-6929  
(414) 453-1199 Fax

## Welcome H.O.M.E., An Unusual New Project Plan

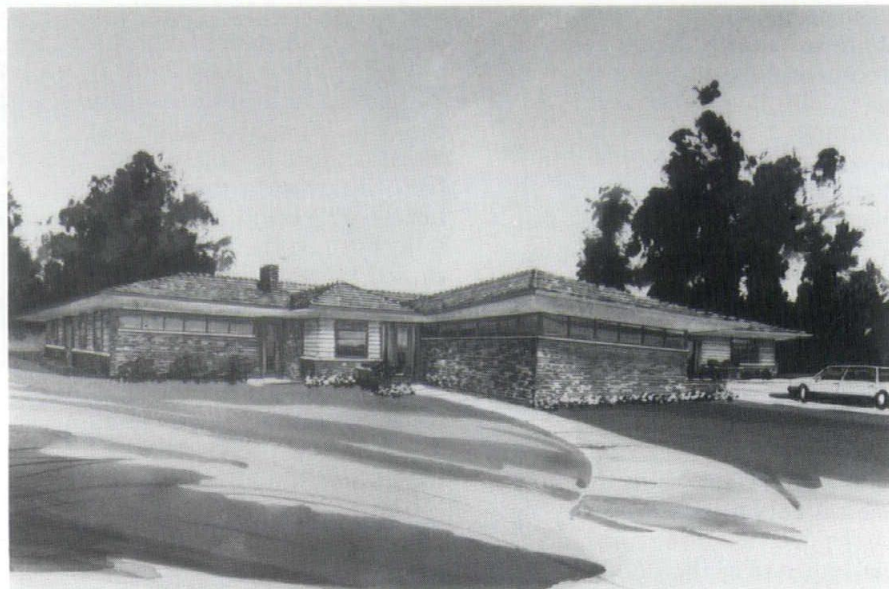
**I**n the Spring of 1990, I met with a young woman named Diane Miller. My view of life has not been the same since.

Diane had contacted the WSA office looking for possible volunteers to help her plan a facility for her organization called Welcome House of Modification Examples, Inc. or Welcome H.O.M.E. for short.

Diane contracted polio at age three. Although she led an active life with the aid of a leg brace and crutches, at age 35 she began feeling the effects of post-polio syndrome. This is a relatively new diagnosed condition, since this is the first generation of polio survivors to live 30 years after being "cured." It is believed that polio sufferers have depleted their energy reserves; the old theory of "no pain, no gain" put too much stress on the healthy parts of the body. For example, the use of crutches for an extended period of time puts excessive stress on the hands and ultimately impairs their use.

As Diane's mobility declined, she met more and more physical barriers including the six steps to her Milwaukee duplex. That prompted her to look for a more accessible home, but she found nothing satisfactory in her price range. That's when she decided to build and came up with the idea of attaching a bed and breakfast—another of her interests. However, most bed and breakfasts are in restored older homes which are usually inaccessible to people in wheelchairs. The idea for the Welcome H.O.M.E. project was born.

Diane's project sparked my interest. The idea itself was revolutionary, plus I had a personal motivation; my thirteen year old



niece is confined to a wheelchair due to spina bifida, and, like Diane, my father is feeling the effects of post-polio syndrome. Always eager for a challenge, I met with Diane.

Diane came to the meeting prepared. She had already conducted an exhaustive search for various aids to assist the physically challenged. She came with stacks of printed materials about every device you could imagine. The problem was that in her research she found there was no place that she could actually try out the equipment to see what was appropriate for her needs until she built them into her own home. Now the project developed into a "living laboratory" for the demonstration of current technology for the physically challenged.

My charge was to assemble all of the elements into a comprehensive package. That's when my education began. Unfortunately, accessibility has a stigma attached to it. In our practices it means incumbrances on our designs, additional cost to the owners for increased square footages and more

codes. The key in changing my attitude toward the design was Diane's statement that almost everyone at some time in their lives will be classified as disabled, either temporarily or permanently. That's when I began to think in terms of the user more than I ever had before.

First I realized that all of the codes are minimum standards. Think of how many times you as an able-bodied person have struggled to get into a minimum sized toilet stall. In the past, we as architects have designed environments so tight that we haven't left any margins for change. Although we are quite proud of our building efficiency ratios, the new ADA guidelines are causing us quite a lot of grief. In addition, as building users, we have to admit that a little extra space sure feels nice. Second, all of the rules of thumb that I had learned about circulation percentages went right out the window. The maneuverability of a wheelchair is slightly different from that of an able-bodied person. But then, who likes three foot corridors anyway?

I began to picture all of the incidents in my life to date when a more universally designed environment would have been nice: negotiating the terrain on a college campus on crutches after a softball game injury, maneuvering a stroller through a tightly designed mall store with virtually no aisle space, climbing three flights of stairs to my condominium when nine months pregnant. At those times I would have considered accessibility features as merely convenience.

Another important point that Diane raised was that in designing a barrier free environment, particularly a home, the designer must understand the disability for which they are designing. A person permanently confined to a wheelchair is one thing, but a person with a condition such as post-polio syndrome is an entirely different situation. Although they may be fairly mobile now, their condition will likely deteriorate and, therefore, not only current, but future, capabilities and limitations must be taken into consideration.

Now armed and dangerous, I took all of the information that Diane had dumped on me and assembled it into a floor plan. Then Diane redesigned and refined, and then I redesigned and refined. Although we still consider the plan to be preliminary, functionally it is pretty close to being finalized. Some of the features of the home include the following.

- As few interior walls as possible where not needed for privacy or security. Rooms large enough to accommodate wheelchair maneuverability.
- Wide doors and doorways (not less than 36" doors).
- Kitchen counters at three different heights corresponding to

use: eating, preparing food and clean-up, and undercounter storage.

- An induction heat cooking surface which requires metal to metal contact to create heat. If a hand accidentally touches the burner, there will be a hot sensation, but not the severe burn caused by standard gas or electric burners.
- Knee space below the sinks. Area below kitchen sink has tambour doors that can be closed when not in use. Stationary pole near the kitchen sink for greater stability while working.
- Faucets activated by an electric eye.
- Pass-through window between garage and mudroom for unloading of groceries and between kitchen and sitting room for delivery of food.
- Remote control skylights, windows and gas fireplace.
- Closet carousel which brings clothes, shoes etc. to the user with the touch of a button.
- Firewood shelf which swings out to load wood from the garage and then swings into a wood closet which is accessible from the living room.
- Pocket doors which are easy for persons with limited mobility to operate and require no swing space.
- No-threshold roll-in showers with hand-held shower heads.
- Laundry room located on main floor with front loading washer and dryer.
- Eight-foot garage door for clearance of modified van.
- A private bedroom to accommodate a possible future caregiver.

During this process, I also learned the dependence that the disabled have on electrical and mechanical equipment in the home. One of the greatest fears is their fate

should there be a failure of these systems. As a result, the following features were incorporated into the facility.

- Exterior exits from all bedrooms in case of an emergency.
- Location of all mechanical components on the main floor within reach from a wheelchair, i.e. thermostats, circuit breaker box, door bells, etc.
- Although an elevator was incorporated for convenience, it was very important to have an exterior exit from the lower floor in the event of a power failure in an emergency.
- Location of an electric panel in the master bedroom which operates lights and other electric devices throughout the house.

Additional features will also be incorporated into the facility to meet other needs such as those of the visually impaired. One feature already included is a special dog door and kennel for companion and working dogs.

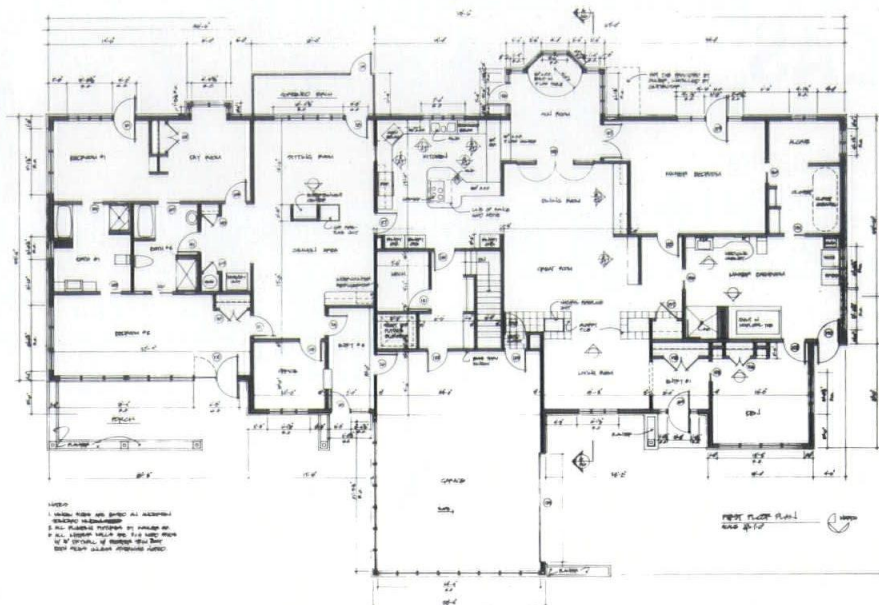
The bed and breakfast portion of the facility has two bedrooms and bathrooms designed to accommodate a variety of needs. One bedroom is designed as a limited care suite, similar to a hotel suite, which would allow a guest to have a travelling companion stay in an adjacent room. The other bedroom would be designed to demonstrate more specialized features such as an adjustable height hospital bed and a permanent lift for easy transfers from wheelchair into bed. The bathrooms are designed to give guest exposure to different types of fixtures available. One bathroom has a roll in shower, pedestal sink, conventional toilet with grab bars, and may include a tub which features a door on it for easy access. The other bathroom con-

tains a roll in shower, conventional toilet with grab bars, a counter with sink, and a conventional tub with a transfer bench. Although Welcome H.O.M.E. will not sell or endorse any one manufacturer or product, they will have information available on all of the features of the house, as well as other products on hand.

Again, one idea is for guests to try out these features, evaluate them according to their physical limitations, and choose what would be appropriate for their own homes. The other idea is that this is a getaway for individuals with handicaps and their families since hotels with "accessible rooms" and most bed and breakfasts do not quite cut it. This facility would also be available to architects and contractors as a technology showcase at no charge.

Of course one of the obstacles in building a one-of-a-kind facility is planning and zoning processes. State agencies had never had a new bed and breakfast facility come across the plan review desk before, so they had to think a while before classifying it as a residential building which would fall under the codes applicable to single family home construction. The local authorities also struggled with the zoning classification.

Concurrent with this process were Diane's quests of site selection and fundraising. After exploring many blind alleys, Diane located an 18-acre wooded parcel of land in Newburg which was owned by Portal Industries, a sheltered workshop for persons with developmental disabilities. Portal Industries sold the land to Welcome H.O.M.E. and provided financing. Upon completion of the facility, Portal counselors plan to use the home to assess clients' home needs and living skills.



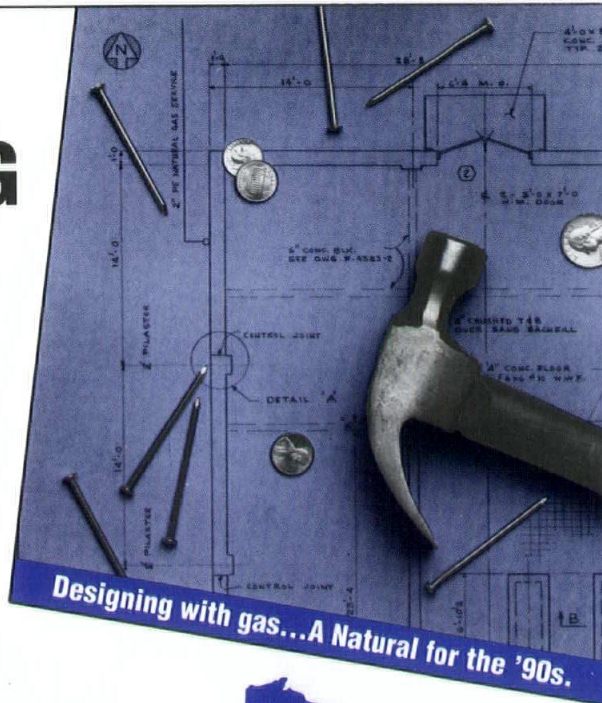
Diane, with assistance from her parents Leo and Sara Miller, has been diligently hammering away at the task of fundraising since 1988. They have approached hundreds of funding sources, both public and private, as well as material suppliers to donate their products to the cause. Kohler has expressed interest in donating all of the plumbing fixtures, and Velux-America is donating roof windows and skylights. Also, the Telephone Pioneers of America, Chapter 4, a volunteer service organization composed of telephone company employees, has begun developing accessible trails and building raised flower beds on the site. All of my services to date, those of accessibility expert Tom Hirsch, AIA, and of illustrator Scott Hefti have also been donated to the project. All contributions are tax deductible.

To say that this project is an enormous undertaking is a major understatement. I admire Diane for her vision and her persistence. What this project has taught me is immeasurable. The implications of accessible design should not be thought of as a hindrance. It is an

evaluation of our profession's norms, and a realization that the minimum standards are no longer acceptable. As architects, we have the opportunity to take the lead in establishing new standards in universal design. The first step is to realize that we will all probably benefit from these technological innovations sometime in our lives as the user. The Welcome H.O.M.E. project will be an important tool for us in understanding the needs of the physically disabled. **WA**

# LOWER BUILDING COST IDEAS

Specifying natural gas with copper tubing and energy-efficient designs for bigger rebates can lower total construction costs. For more information, call your local natural gas utility.

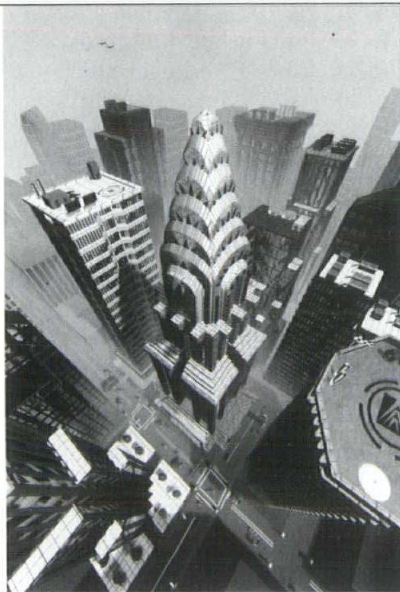


**Wisconsin  
Blue Flame  
Council**

## AUTODESK 3D STUDIO™ RELEASE 2

**Bring Your AutoCAD®  
Drawings to Life**

Autodesk 3D Studio™ Release 2 transforms DXF™ files into dramatic, richly detailed 3D renderings and animations. 3D Studio makes it easy to visualize and present your AutoCAD drawings for a fraction of the price of comparable 3D modeling, rendering and animation software. Call us today to schedule your demonstration.



**AUTODESK**

AUTHORIZED MULTIMEDIA DEALER

## **MASTER BLUE PRINT INC.**

**Madison**  
810 W. Badger Road  
Madison, WI 53713  
800-873-7238

**Appleton**  
670 Westhill Boulevard  
Appleton, WI 54915  
800-283-7238

**Milwaukee**  
8112 W. Bluemound Rd.  
Milwaukee, WI 53213  
800-279-7238

FINALLY,  
A STACKING  
CHAIR THAT'S  
COMFORTABLE  
...ANYWHERE



FIRENZE  
CHAIR



**Landscape Forms, Inc.**  
Bill Quinlan  
835 West Webster  
Chicago, IL 60614  
FAX 312/871-4617  
312/871-8810  
800/255-0341

# Interior Design Winners

**A**s a tribute to the quality of interior design executed in the Madison area, *Madison Magazine* sponsors an annual competition. The competitions, first featured in 1987, are under the direction of Gail Selk.

This year's panel of judges included Robert Bartholomew, professor in the University of Wisconsin—Madison Department of Environment, Textiles and Design; Roger D. Roslansky, AIA, of HSR Associates, Inc.; Jean Sedor of Janesville, president of the Wisconsin Chapter of ASID; and Inge Winters, member of ASID and IBD with Venture Design of Cedarburg.

Among the winners this year were several WSA members, whose projects we proudly present here. **WA**

## First Place

**Project** Bell Metzner Gierhart & Moore, S.C.  
**Design Firm** Architecture/CSG, Inc.  
**Designer** Colin L. Godding, AIA  
**Photography** Dale Hall



Both floors in this project are joined into one interactive space by a custom-designed central staircase. The reception area was planned with seating clusters adjacent to conference rooms so clients do not have to sit side-by-side with the opposition. This planning also allows the receptionist to control flow of traffic through the office. Classic furnishings and rich materials create a sense of stability.

## Second Place

*Project* Oscar Rennebohm Library  
*Design Firm* The Durrant Group, Inc.  
*Designer* Charles M. Kurt  
*Photography* Dale Hall



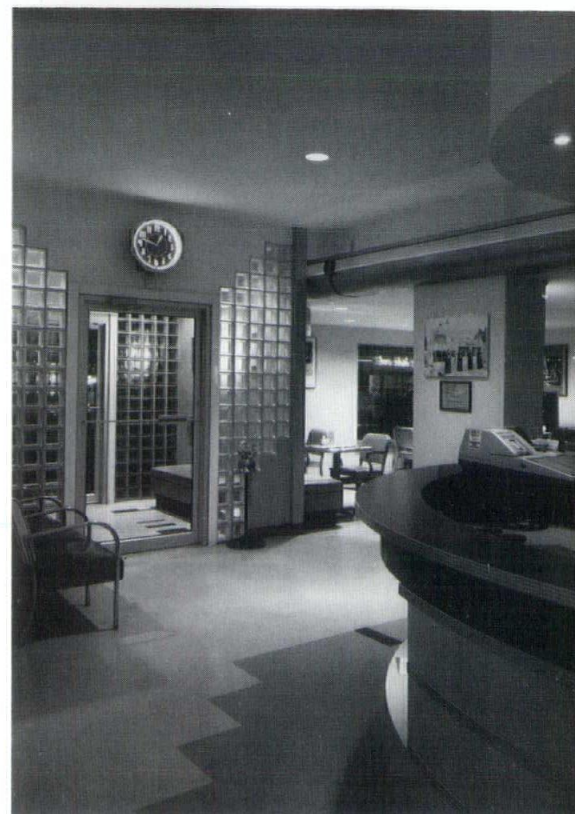
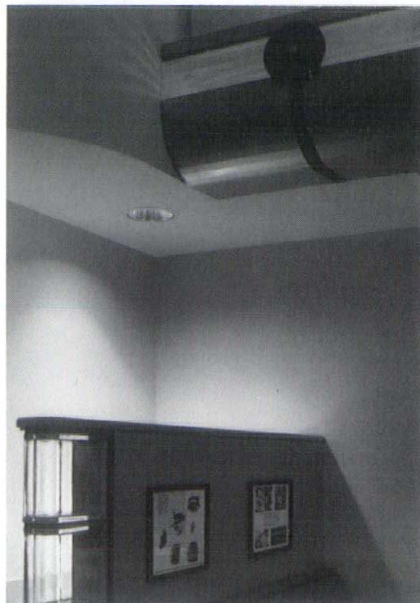
Taking advantage of the wooded site, a curved, two-story wall of windows gently extends into the woods to provide an airy, well-lighted reading area. Potted trees serve to further bring the outside in. A color scheme of neutrals, deep green and earthy red accompanied by rich wood grain reflects the Native American heritage of the site.

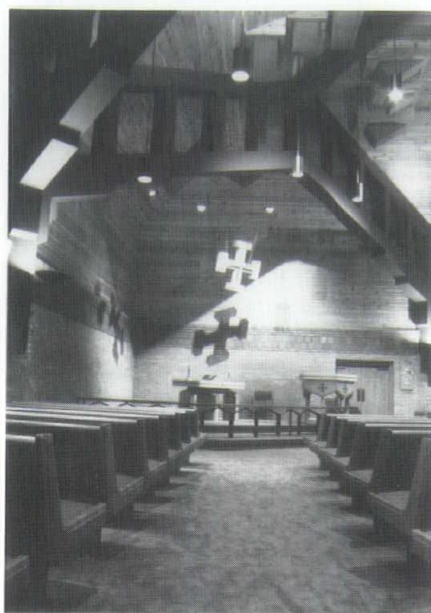
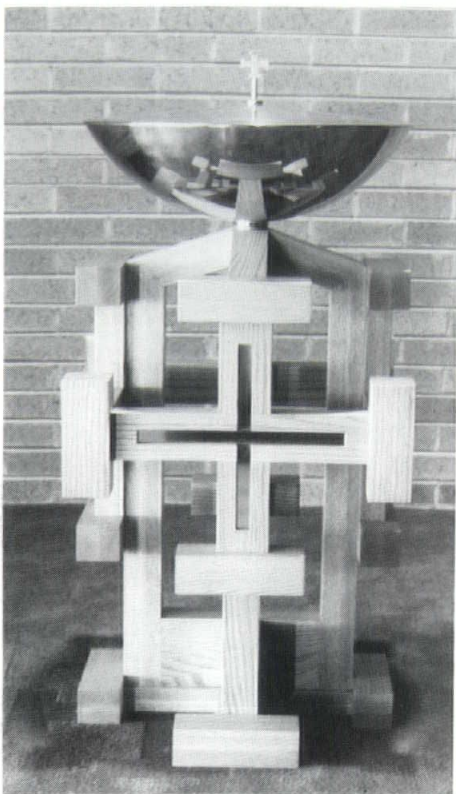


## Third Place

*Project* Monty's Blue Plate  
*Design Firm* Linville Designs  
*Designer* E. Edward Linville, Associate AIA  
*Photography* Dale Hall

Formerly a gas station, this restaurant interior strives to create a clean, vibrant modern look of the late 1940s. Men were returning home from World War II. It was a time of optimism. Appropriate materials such as stainless steel, neon and glass block pay respect to a rich period in our history.





Comments from the judges included words such as dramatic, creating feelings of humbleness—yet grandeur and warmth through effective lighting. The narthex was designed to handle overflow seating from the nave. Persons with difficulties in walking were considered in door and seating arrangements. As congregation members grow older, barriers should not prevent the privilege of worship in a church.

#### **Merit**

*Project* Our Redeemer Lutheran Church Addition  
*Design Firm* R. C. Shutter, Inc.  
*Designer* Kevin E. Donahue, AIA  
*Photography* Kevin E. Donahue, AIA

#### **Merit**

*Project* Woodland Prairie Home  
*Design Firm* Linville Designs  
*Designer* E. Edward Linville  
*Photography* Zane Williams

An interior expressing Midwest regionalism was requested by the client. A design striving to weave various textures and colors with the natural features outside the windows allowed the strength of the land to be reflected inside the home.

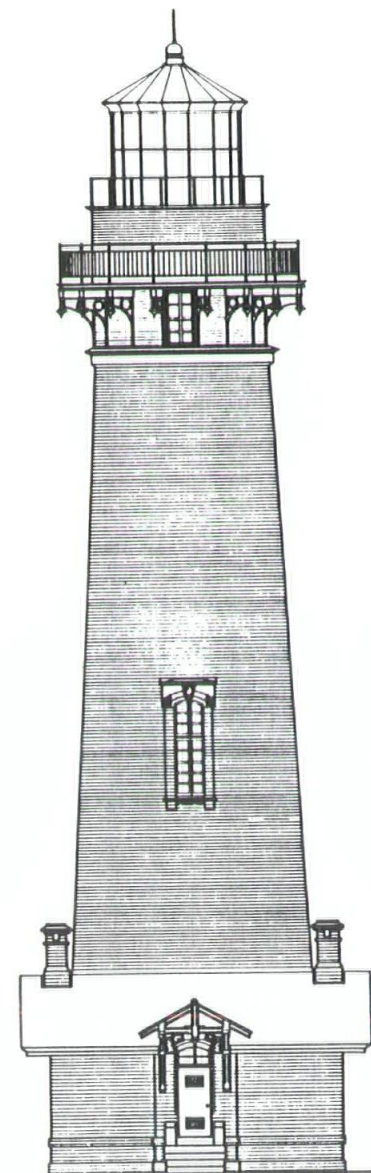


Montjuic  
1992  
Santiago  
Calatrava

and  
over two  
hundred  
lighting  
models  
original  
italian  
american  
world  
design  
leadership  
technology  
innovation  
performance  
energy saving  
u.l. listing  
quality  
warranty  
service  
investment

**Artemide®**  
the one stop

Chicago Regional Sales Office & Showroom: 208 West Kinzie Street Ph: 312.644.0510



PIGEON POINT LIGHTHOUSE, SAN MATEO COUNTY, CA.

## PRESERVATION PLAN ON IT

Planning on restoring a house, saving a landmark, reviving your neighborhood?

Gain a wealth of experience and help preserve our historic and architectural heritage. Join the National Trust for Historic Preservation.

Make preservation a blueprint for the future.

Write:

**National Trust**  
for Historic Preservation  
Department PA  
1785 Massachusetts Ave., N.W.  
Washington, D.C. 20036



*Nancy Lynn*  
INTERIORS, INC.

5423 N. 118th Court  
Milwaukee, WI 53225  
414-535-1042

*Residential and Commercial*

*Poast Commercial  
Photography*

Steven T. Poast, CPP  
414-642-3743

J.W. Peters & Sons understands parking structure design and construction like few companies in America.

Consider:

- Peters is the only producer in the Midwest to complete 100 or more precast/prestressed concrete parking structures.
- Only Peters has such in-depth experience with parking structures for every application—from municipal and health care to retail and office facilities.
- For more than 20 years, Peters has



been a leader in developing more cost-effective design and more durable, corrosion-resistant structures.

- More than 72,000 vehicles park daily in Peters facilities in Illinois, Wisconsin, Indiana and Michigan.

Peters has earned a unique reputation by meeting the most exacting architectural requirements for precast components in shapes, colors and textures that have changed the appearance of parking structures forever.

After 115 parking structures...you can count on J.W. Peters.

# 115 PARKING STRUCTURES... AND COUNTING

## JW PETERS AND SONS, INC.

34212 West Market Street • Burlington, WI 53105 • (414) 763-2401  
(312) 782-4691 (Chicago) • (414) 272-7222 (Milwaukee)



Lake Avenue Parking Ramp, Racine, WI:  
HSR Associates, Inc., Madison, WI

Riverwalk Parking Structure, Buffalo Grove, IL:  
Wilson/Jenkins & Associates, Inc., Itasca, IL

# MEDICAL, MUNICIPAL PARKING: MAKING EXPERIENCE COUNT

Experience is the critical factor in parking structure design and construction...and few precast/prestressed concrete manufacturers in the nation have as much experience as J.W. Peters. The company is particularly experienced in serving the special needs of municipalities and health care facilities.

In 1990, J.W. Peters became the first precast/prestressed concrete manufacturer in the Midwest to complete 100 parking structures. Peters has been responsible for parking structures of every size and description for a wide range of clients. And, hospital and municipal parking facilities built with Peters' precast components represent over 5 million square feet of parking facility, with over 16,000 total spaces.

Among many notable hospital and municipal projects...

tion can be completed in less time than with other construction methods. Components are fabricated and stored off-site, then shipped to the project as needed. Problems are minimized by eliminating the on-site presence of the men and materials that would otherwise be required for cast-in-place structural work.

Site preparation and concrete production occur *simultaneously*, not sequentially. Precast components can be ready the moment the site is ready, potentially shaving weeks, even months, from the schedule. Both fabrication and erection of components can proceed throughout the winter months, regardless of weather.

## Long-Term Durability

Hospitals and municipalities are long-term owners that must minimize maintenance and repair costs over decades. They demand superior parking structure durability.

Weather extremes, salt-induced corrosion, and vehicular traffic can rapidly deteriorate a concrete structure of lesser quality and significantly increase costly maintenance and repairs.

J.W. Peters parking decks are unsurpassed in their strength, durability and corrosion resistance. The trouble-free service life of a Peters parking structure can yield a savings of thousands of dollars per year.

J.W. Peters builds long life into its structures with superior concrete...careful design for drainage...adequate concrete cover to protect structural steel...and installation of the proper corrosion-protection system at the time of construction.

For example, J.W. Peters heat-cures every precast component, heating form temperatures up to 150 degrees Fahrenheit. As was demonstrated by a three-year study conducted for the Federal Highway Administration (FHWA), heat-cured precast concrete members are up to 50 percent more durable than moist-cured concrete of the type used in cast-in-place concrete construction.

For unrivaled experience, in-depth knowledge of the special requirements of hospital and municipal officials, accelerated construction capabilities and superior product durability...contact J.W. Peters & Sons, Inc., manufacturers of structural and architectural components for parking structures and other applications.

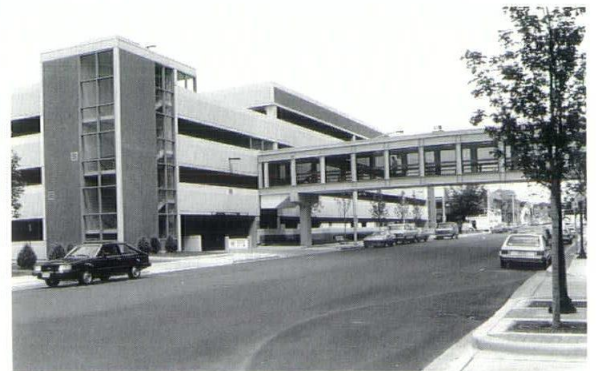
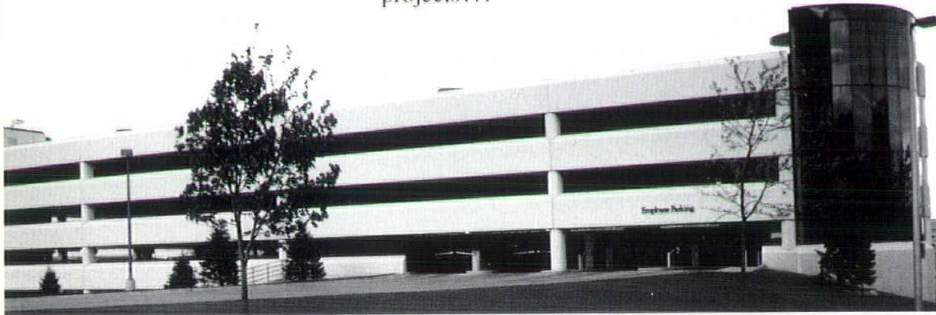
- St. Francis Hospital, Evanston, Ill., a seven-level, 1,300 vehicle parking structure constructed in two stages. In 1980, J.W. Peters completed the first five levels to provide parking for 950 vehicles. Peters returned in 1990, to add two new levels to the top of the existing structure, providing spaces for 361 additional cars.
- Froedart Hospital, Wauwatosa, Wis., a four-level, 1,000-space, 285,000-sq.-ft. parking structure.
- St. Mary's Hospital, Madison, Wis., a 900-space, 184,000-sq.-ft. five-level structure.
- Good Samaritan Hospital, Downers Grove, Ill., a 221,000-sq.-ft., 980-space, three-level structure.
- Milwaukee's Bradley Sports Complex, a 300,000-sq.-ft., 900-space, eight-level structure.
- Stolpe Island Place, a five-level, 122,000-sq.-ft. parking structure in Aurora, Illinois.
- and two parking decks in Wheaton, Ill. which together provide over 3,000 parking spaces for DuPage County government.

While each hospital and municipal project has its own requirements, the great majority share a need for accelerated construction schedules and superior durability.

## Fast-Track Construction

Limitations on available land often mean that new parking structures must replace surface lots. Neither municipalities nor hospitals can long afford the loss of revenue and inconvenience that occur when existing parking lots are taken out of service. They are also critically concerned about their ability to maintain the orderly flow of traffic and business during new construction.

Precast concrete parking structures reduce disruption because much of the work can be done off-site and erection



## A Garden as an Outdoor Classroom

**T**he Allen Centennial Gardens on UW-Madison's west campus was planned to be a unique teaching garden. In addition, it will provide enjoyment for the general public and become a showplace for visitors from around the world.

In 1979, the horticulture gardens were lost to space needs for building expansion. Today, as a replacement, a tapestry of native and exotic plants—from grasses and water plants to shrubs and trees—is being planted to further the education of horticulture students. Appropriately, the new 90,000 square foot site wraps around the historic Victorian house at 620 Babcock Drive, now on the Historic Register and last used as a residence by college president Edwin B. Fred. All funding for the gardens comes from private donations.

Years of planning preceded the flurry of activity which began in the spring of 1988. Turn-of-the-century sunken tennis courts in the back lawn were filled in rather than removed. Some areas of the garden required fill dirt to a depth of ten to twelve feet. Contours of garden spaces and pathways were graded in, stone walls were built, and bridges and other architectural features were constructed. All of this brought to life the design concept created by Dennis Buettner.

Allen Centennial Gardens is actually a composition of more than twenty small garden areas in

the European tradition, each with its own name and purpose. A visitor could spend hours absorbing all it will have to offer when completed. The actual plant design was worked out using hundreds of kinds of plants, both native and exotic.

Several historic trees still exist on the grounds near the house, such as the historic European Larch given by a horticulture professor in 1899. A Victorian style garden greets the visitor who enters the circle drive. Two carved stone urns will be planted as living bouquets of exotic flowers. During the time of Queen Victoria, plant hunters scoured the world for unusual plants to bring back to the British Isles to satisfy the romantic tastes of that day. A weeping Russian Mulberry, urns with trailing plants and contrasting uprights compose this garden, heavy with fragrance. In an adjacent paved area is the Orientation Garden. Here, seating is provided near the central feature, a map highlighting garden locations and themes. This can be studied while enjoying the view

before descending broad steps to a lower level.

For reserved tours, guides will be available to explain the complex and detailed nature of the project. There is a Rock Garden containing truckloads of weathered limestone from farms near Mt. Horeb plus other Wisconsin rocks and six hundred plants. The Water and Bog Gardens will show the amazing contrast between life in fresh versus acid waters, from goldfish and water lilies to transplanted spagnum moss. There is a Wisconsin Wildflower Garden, a Shrub Display, a Renaissance Garden and a Ground Cover and Lawn Display with twelve kinds of cultivars.

The English Garden may become a favorite with its horseshoe-shaped lawn bordered by a path and a flower border all closed in by a protective six-foot hedge and a higher wooden fence. The path of bluestone paving from Pennsylvania leads to a pavilion in the center, a setting for possible weddings. With this in mind, the

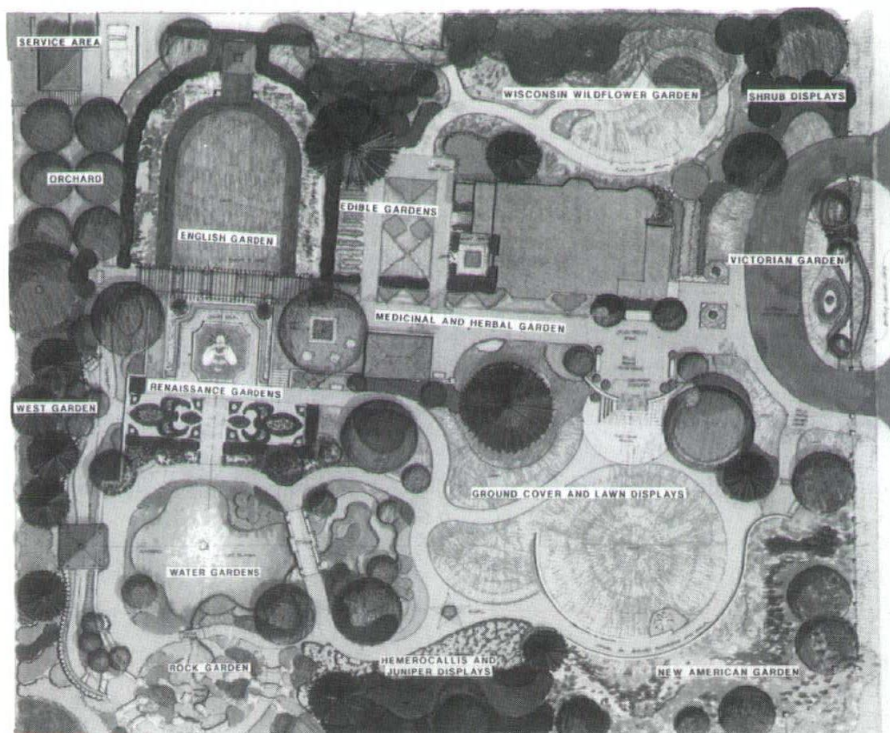


flower border was designed by Cheryl Eberle of Brooklyn, Wisconsin with bright vibrant colors on the east side and pastels on the west. As the border curves toward the center, the flowers on both sides fade to white. Nearby there will be electric hook-ups for serving small receptions and parties under a canopy or tent.

Buettner's design was built around several important axes through the gardens. From the pavilion the eye looks across the English Garden, along a center path through the Renaissance Gardens, across the Water Gardens and focuses on a dramatic distant church tower on the skyline, a bit of delightful serendipity. A historic sundial of stone and bronze has an appropriate home in the gardens. It was given to the university years ago by mothers of World War I veterans.

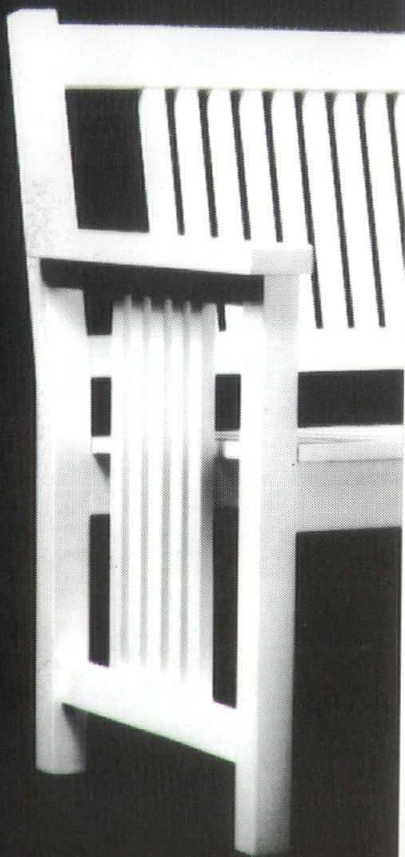
The centennial anniversary of the college of Agriculture and Life Sciences is commemorated by the planting of these gardens. They were named for Oscar N. Allen, a former professor of bacteriology. In addition to viewing the gardens, interested gardeners may join a volunteer group for training and may actually work among the plants on a regular basis, sharing some of the "hands on" excitement with the horticulture students. **WA**

*EDITOR: Professor Dennis Stimart is director of the Garden Project. William Hoyt is outreach specialist and may be called for reservations at 262-1549.*



Photography: Wolfgang Hoffmann

MAKING AN  
UGLY WOODEN  
BENCH GOES  
AGAINST  
OUR GRAIN.

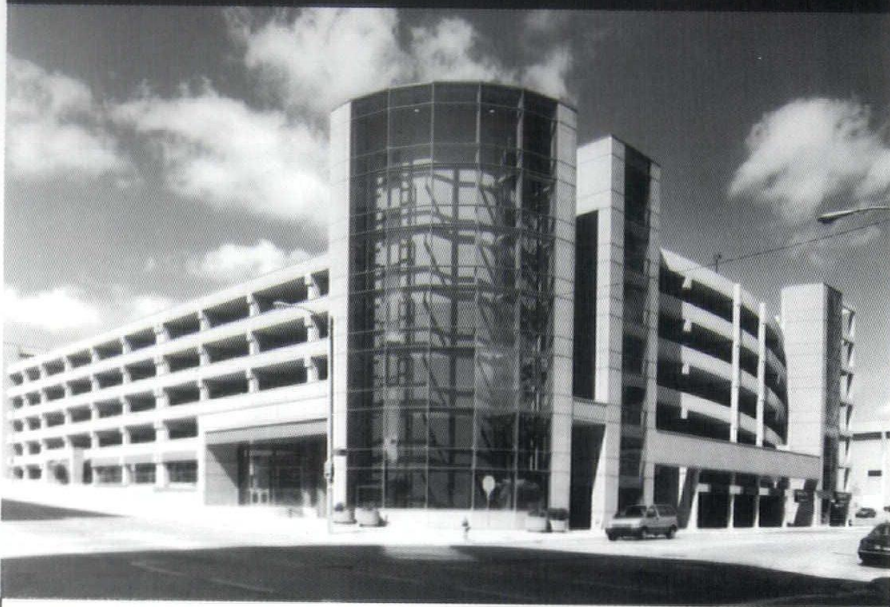


KENWORTHY  
PRAIRIE BENCH



LFI/Landscape Forms  
Bill Quinlan  
835 West Webster  
Chicago, IL 60614  
800/255-0341  
312/871-8810  
312/871-4617 FAX

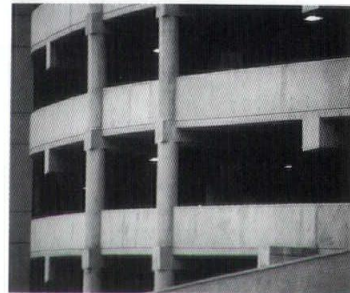
# The Concrete Advantage



Bradley Center Parking Structure, 8th and West State Street, Milwaukee

## Cast in place concrete parking structures.

Cast in place concrete is economical, durable and flexible. And its monolithic structure eliminates most of the maintenance associated with other construction methods.



STRUCTURAL CONCRETE PROMOTION TEAM  
Wisconsin Ready Mixed Concrete Association  
9415 W. Forest Home Avenue  
Hales Corners, WI 53130



800-242-6298

## Moving?

Let us know 4-6 weeks in advance so that you won't miss a single issue of *Wisconsin Architect*. Please include a copy of the old label.

### New Address:

Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Mail To:  
WISCONSIN ARCHITECT  
321 S. Hamilton St.  
Madison, WI 53703

## Pella® Improves On An Original.

The renovation done for Professional Marketing Services is just one example of how Pella can improve a window's function without changing its character. The former Johnson Electric Motor Car Company building now houses office and production space for PMS.

The Pella windows on this beautifully restored building are more energy-efficient and durable than the originals because they feature Pella clad frames, springline units (in a custom green color) and extruded aluminum muntins. Yet, they retain the look of old double-hung windows. A traditional French door opens out to a rear courtyard, enjoyed by employees as a rest and relaxation area.

Pella proves that you don't have to sacrifice beauty for function in window design.



# VERHALEN INC.



## COMMERCIAL DIVISION

Green Bay   Madison   Marquette, MI   Mequon  
Milwaukee   Neenah   Racine   Waukesha   Wausau

## Coming Up in Wisconsin Architect

July/August

Honor Awards, Computers. Technical

September/October

Public Projects, Health & Recreational Buildings

November/December

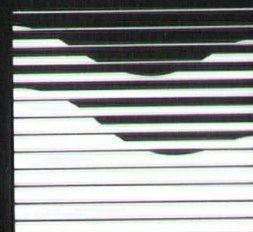
Historical Preservation, Adaptive Re-Use  
Restoration, Cultural & Religious

*Call now for more information!*

**608-257-8477**

WISCONSIN  
CHAPTER

AMERICAN  
SOCIETY OF  
LANDSCAPE  
ARCHITECTS



# ASLA

ROSTER OF  
MEMBERSHIP  
AVAILABLE

P.O. BOX 851  
MADISON, WI.  
53701-0851

## NEED REPRINTS?

Reprints of your  
ad or article are  
available for a  
surprisingly low  
price from  
**Wisconsin  
Architect.**

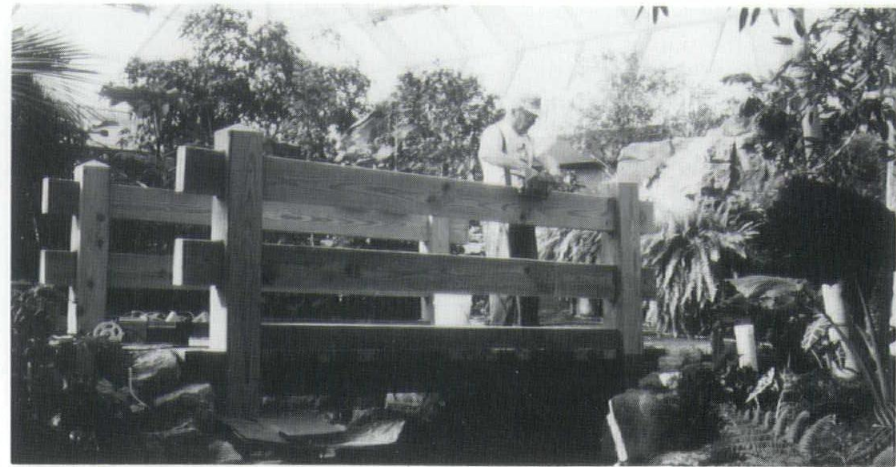
*Enhance your  
marketing efforts!*  
**Call 608-257-8477**

## A Rainforest Transplanted to Madison

**O**n a freezing winter day, one can shed scarf and sweater and enjoy hundreds of exotic ferns, palms, vines and flowers growing along streambeds and up hillsides while listening to a rushing waterfall in the Adolph C. and Eugenie Mayer Bolz Conservatory at Olbrich Gardens in Madison. Winding paths lead through an eerie fog created by 220 misting nozzles. A unique two-tiered handicapped accessible path system allows people to look down on the lush growth from above.

The pyramid-shaped glass and steel conservatory was designed by Stuart Gallaher, AIA, who died unexpectedly several months before the opening. For several years he had been involved almost weekly with the staff, even joining them on visits to conservatories around the country to better understand the tropical habitat.

This new botanical center also includes a spacious foyer, library, offices, large meeting room, catering kitchen and giftshop. The 10,000 square foot pyramid soars to a height of fifty feet with thermal glass and huge automatic curtains on the south and west walls to rise at night and hold in the heat. In summer the same curtains shade plants from hot midday sun. The curator says that 70 degree temperatures are easily maintained even though winter may drop out-



Photography: Eugene Casselman

side temperatures to twenty degrees below zero. Much winter heating is solar, but a back-up water heating system is available.

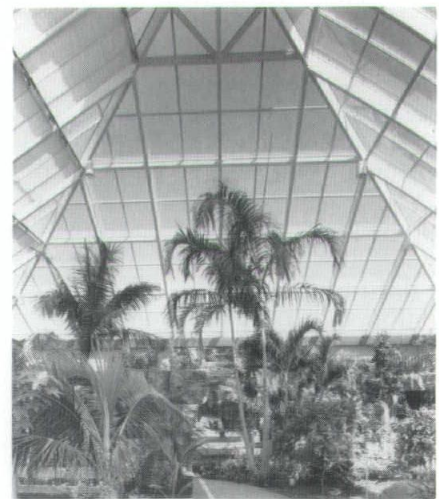
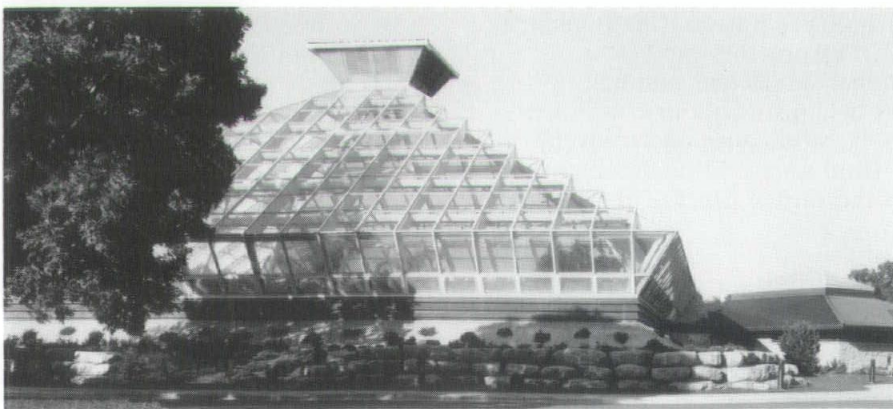
Insulated glass has clear tempered glass on outside with laminated glass inside. Air is circulated with eight paddle fans and exhausted with squirrel cage fans in the cupola. Dampers bring in fresh air on the north side of building and window vents provide ventilation on south and west sides.

Supporting the roots of these exotic trees and plants is a bed of sand twelve feet deep topped by 18 inches of soil. Drainage tile is placed between sand and soil. The rocks are panels made from limestone outcroppings. They are actually fiberglass and concrete and are welded on to a foundation wall. An artist painted the rocks

to resemble aging rock formations using rocks at Madison's Hoyt Park as the prototype for color.

In mid-January twelve birds—waxbills and canaries—were brought in to get acquainted with their new environment while kept in a large cage. Early on the first morning of February they were released and in less than two weeks one pair had woven a handsome nest from the hank of horsehair provided and were busy hatching tiny eggs.

This group of miniature pioneers will multiply, adding color and song to the tropical setting while controlling the aphids and other harmful insects. **WA**



# Understanding the Value of the Garden

If we compare the outer surface of the planet Earth to the skin of the human body, we find some interesting similarities:

- Both are the extreme manifestation of beauty of form.
- Both are of prime importance to the survival of the body as a whole.
- Both are perpetually regenerating until death.

Many modern scientists are beginning to take a holistic view that the universe is the interrelating sum of all of its parts and that elimination of one facet for the sake of another can be detrimental to the ecology of the whole. It has been suggested that ethical design improves the "ecological fitness" of the environment (Rosenberg, 1986). As designers, we have a responsibility to the planet, to our profession and to those who use the environments we transform. The degree of our commitment will produce an equal measure of effect. This article will examine the importance of restoring the garden as one means to achieving this fitness to improve the quality of our lives. We will observe in chronological order, past attitudes toward the garden.

The garden has been an element in human culture since at least the 8th millennium B.C., when "a rich green oasis, patterned solely according to the science of agriculture, spread like a vast carpet in the Tigris and Euphrates valley" (Jellicoe & Jellicoe, 1975). In a less tangible sense, the garden has been a symbol of our religious, political, personal and professional lives for at least as long, and has provided a place of inspiration and contemplation. Jellicoe further suggests that "the paradise garden itself, in its purity was a square enclosed against a hostile world, crossed by water



channels symbolic of the four rivers of heaven, containing theoretically, all the fruits of earth."

We have learned to survive without the personalized crop garden and the spiritual garden. A visit to the supermarket or mall can provide a tropical paradise and fruits and vegetables from as far away as New Zealand. But pilgrimages to the sacred wilderness gardens increase annually as we trample in droves our natural wonders, hungry for that essence of purity that is missing from our lives. During peak season, the Grand Canyon accommodates over 600,000 visitors per month (National Park Service, 1991) and the average hiker may pass up to 35 people per hour on the popular trails. Perhaps this exodus to wilderness areas and national parks demonstrates our continued need for sustenance and rejuvenation from a natural landscape, a need the garden can fulfill.

Although often described and analyzed, there is no accepted understanding of the meaning of the garden. If we take the description of Robert Riley that "the garden is an expression of only one of many possible relationships between people and the natural world," then we may find that our preexisting mindset does not restrict our ability to design or manage a garden. In a more poetic sense, the garden has been defined as a celebration of motion and change, an active process of cause and effect, a seasonal place marking points in time and a sensory experience evoking emotion. "The garden is where we deal with the basic dialectic of our existence, the tension between life and death." (Riley, 1988)

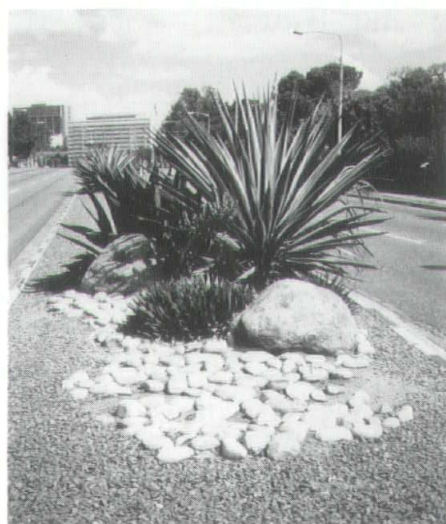
There was a marked time period when the garden began to lose its importance to human beings. It was the era when the great pastoral urban parks such as Central Park were being designed and established as places for recreation. Nature was to be passive, harmonious and useful. Riley

points out that an anti-garden sentiment emerged among many designers of the day. Landscape architect Elbert Peets said "The current American is not a gardener...he loves grass, trees, sunlight and panoramic views."

Today, some 60 years later we are still living with this legacy of sweeping lawns, serpentine shrub borders and long views. Though fine as a skeletal backdrop, there is more to the garden. With the onset of the corporate landscape, pastoralism has been epitomized, complete with the addition of the duck pond. But the sense of sameness is becoming worldwide. A corporate landscape in Rolling Meadows looks much like one in Johannesburg.

Some designers are growing tired of homogeneity and are designing with a garden-like feel by creating places that are meant to be actively enjoyed rather than passively noticed. As described by landscape architect Ken Saiki, "Complexity and richness of detail separate the garden and naturally occurring plant communities from much of our cultured landscape."

*A garden can be found in the most surprising places; this median strip requires no mowing, yet adds interest to an otherwise desolate environment.*



When a garden is shared and experienced by many there is much satisfaction to be gained. The positive response is important in that it brings joy to our lives. Several recent studies showed that hospital patients in rooms overlooking a quality view of nature scene recovered more rapidly than patients without such views. (Verderber, 1986) (Ulrich, 1984) If a garden can heal the sick then it must surely be beneficial to the healthy.

Aesthetics too are important. "If you can accept the premise of the garden as art, that opens the creative possibilities for the design to enrich the human experience in the built environment," according to Saiki.

It seems that the priority in most design is focused on low maintenance rather than aesthetics and human appeal. There's the perpetual question of how much it will cost to maintain. While it is true that some gardens require more maintenance than others, good design does not necessarily have to cost more to install and manage. It's time to let design

lead and maintenance will certainly follow. The point is that the garden gives endless possibilities that should not be overlooked by the designer or those who use the garden. The greatest opportunity is the improvement of the quality of our daily lives. **WA**

*EDITOR: The author is owner of the Madison based firm Avant Gardening and Landscaping and wishes to thank Jon Kollitz, Ken Saiki and Darilyn Million for their ideas, inspiration and assistance with this article.*

*Photography: Liza Lightfoot*

# BiltBEST Windows

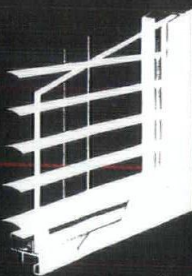
*Distinctive  
Elegance*

**GREAT PLANS  
FOR A GREAT  
TOMORROW.**

- BLIND BETWEEN GLASS —  
SAVES CLEANING
- AN ADDITIONAL AIRSPACE  
MEANS BIGGER HEATING AND  
AIR CONDITIONING ENERGY  
SAVINGS
- SLATS AVAILABLE IN  
BRONZE, WHITE, OR  
SANDSTONE COLORS
- COMPLETELY  
RETRACTABLE
- GIVES YOU LIGHT  
AND GLARE  
CONTROL

*First  
Impression*

**1**



2010 Dickinson Ave.  
Oshkosh, WI 54901  
414-233-3333

3134 Gross St.  
Green Bay, WI 54304  
414-499-7665

2705 W. College Ave.  
Appleton, WI 54914  
414-731-9555

Fond du Lac, WI  
414-922-7797

**One Of  
America's  
Best Run  
Companies  
Gives 95%  
Of Its  
Money  
To Charity.**

CARE was recently  
named the best run,  
best managed charity  
in America.

We aren't surprised.  
95% of every dollar  
we receive goes to help  
impooverished people.  
Only 5% goes to run  
our organization.

No other company  
could survive on mar-  
gins like that. But a lot  
of starving people can.

## Are You Reading This?

If you don't see your company advertised in the pages of this magazine, then neither do the architects, engineers, interior designers, contractors, facilities managers, specifiers and landscape architects who read Wisconsin Architect all year long!

**(608) 257-8477**

**CARE**

We're Helping People  
Learn To Live Without Us.  
1-800-242-GIVE

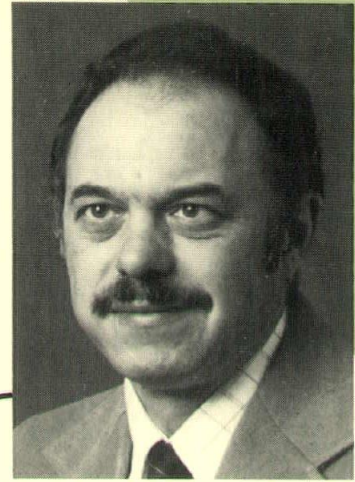
**Hiring a sheet metal contractor?**

***Remember: the best bid is  
the one that gives you  
the greatest value for your  
construction dollar.***



# A Message from our Chairman

— **Jim Foulker**  
**Chairman, Madison Area Sheet Metal  
Labor-Management Council**



## MADISON AREA SHEET METAL LABOR-MANAGEMENT COUNCIL

Dear Construction Buyer:

Quality. Efficiency. Craftsmanship. Professionalism. Reliability. These are all critical factors that help to define the value you receive when you choose the right sheet metal contractor.

What you really need to look for is not the lowest bid, but the one that will give you the most value for your dollar. The one that will enable you to control expenses while avoiding the costs of sub-standard work.

This is where the training and experience of skilled union craftsmen can make the difference. They're your best assurance that the job will be engineered right and built right.

The Madison Area Sheet Metal Labor-Management Council consists of more than 20 union sheet metal contractors, plus Sheet Metal Workers Local #18. One of our goals is to open the channels of communication with decision-makers like yourself, so we can determine how we can serve you better. We also think we can help you by providing useful information about the advantages and benefits of hiring local union contractors.

If you'd like to discuss this subject with a member of the council, please feel free to call our office: (608) 256-6886. We welcome your opinions and comments.

A handwritten signature in cursive script that reads 'James W. Foulker'.

James W. Foulker  
Council Chairman and  
Member of Sheet Metal  
Workers Local #18

## ***Productivity and performance: key ingredients for getting the most value for your construction dollar.***

Regardless of how good a bid may look at first, you must remember one thing: Hiring a contractor who's unable to maintain control over costs, deadlines or quality standards always costs you extra in the long run. It's a lesson some people have had to learn the hard way.

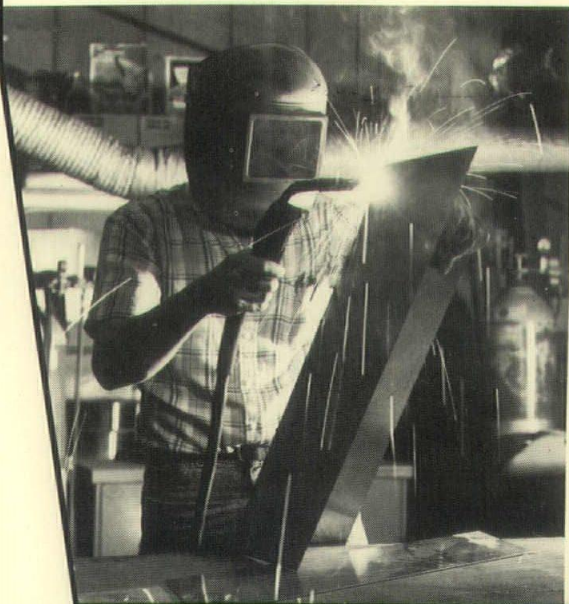
The members of the Madison Area Sheet Metal Labor-Management Council are dedicated to helping you avoid such problems. That's why they've taken the steps necessary to ensure that they provide the highest levels of productivity and performance on the job.

Their secret is simple: They employ the best trained and most highly skilled labor to get the job done on time, within budget, and with strict adherence to the highest standards of

superior workmanship. It's a formula that's proven to be unbeatable.

When you hire one of our member contractors, you can feel secure in the knowledge that you're dealing with an experienced and dependable firm that won't let you down. One that's backed by the best technical and logistical support in the industry. And one that has the versatility, creativity and stability to ensure that you're going to get the maximum value for your dollar.

The Madison Area Sheet Metal Labor-Management Council represents union contractors and organized labor working together to maximize the value received by you, the customer. As long as we succeed in doing that, we know we'll continue to earn your confidence.



**THIS MESSAGE IS SPONSORED BY THE FOLLOWING  
MADISON AREA UNION SHEET METAL CONTRACTORS  
AND SHEET METAL WORKERS LOCAL #18:**

A-1 RESTORATION, INC.  
ADVANCED TEMP. TECH., INC.  
AIR COMFORT, INC.  
AIR TEMPERATURE SERVICE, INC.  
B & M HEATING, INC.  
B & T MECHANICAL, INC.  
ENVIRONMENTAL MANAGEMENT CO.

ENVIRONMENTAL SYSTEMS ANALYSIS  
GENERAL HEATING & AIR COND., INC.  
H & H INDUSTRIES, INC.  
HARKER HEATING & COOLING, INC.  
HERRLING METAL & HEATING  
HOOPER CONSTRUCTION CORP.  
KILGUST MECHANICAL, INC.

LAKE CITY MECHANICAL  
LAKELAND TEMPERATURE DESIGNS  
MADISON MECHANICAL, INC.  
MECHANICAL TEAM, INC.  
MIDLAND BUILDERS  
MIDWEST MECHANICAL CONTR. CORP.  
SULLIVAN BROTHERS, INC.



*- This symbol is your assurance that construction users can count on their member contractor to do the job right — and keep it that way throughout the life of the system.*

**MADISON AREA SHEET METAL  
LABOR-MANAGEMENT COUNCIL**

1245 E. Washington Ave., Suite 184, Madison, WI 53703

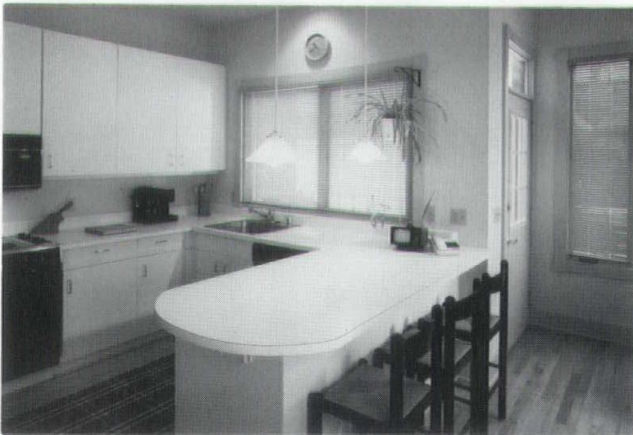
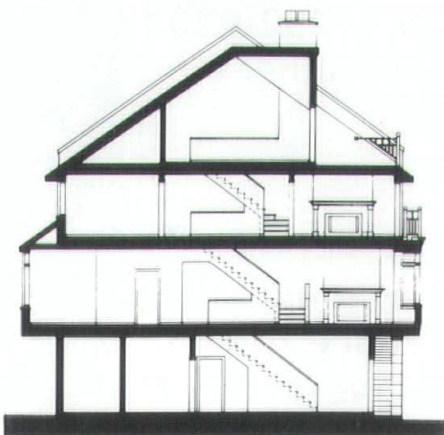
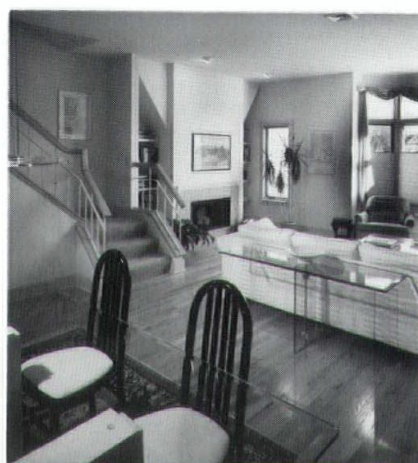
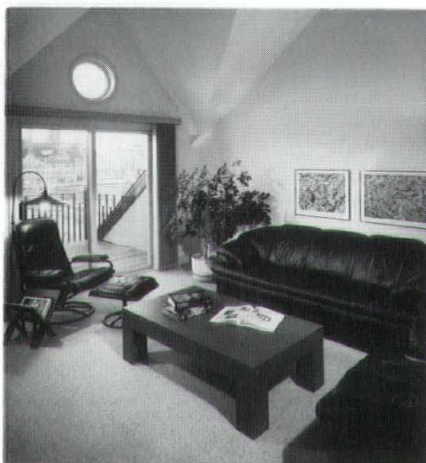
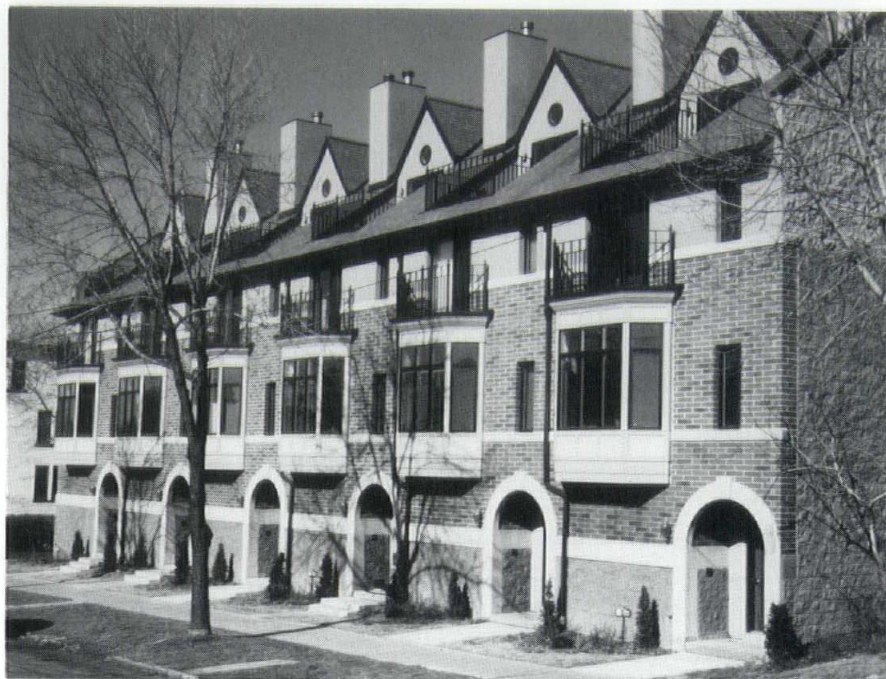


<i>Project</i>	<b>Astor Lyon Rowhouses</b>
<i>Location</i>	<b>Milwaukee, Wisconsin</b>
<i>Architect</i>	<b>Engberg Anderson</b>
<i>General Contractor</i>	<b>Matt Starck &amp; Sons</b>

Among turn-of-the-century homes and apartments in walking distance of downtown Milwaukee, these rowhouses were designed with close attention to scale and historic character. Six luxury units were built.

Ground level includes a 2-car garage and service areas while the fourth level loft area contains dramatic 14 foot sloped ceilings opening out to a terrace with southern exposure and exciting views of city and Lake Michigan.

*Photography: Eric Oxendorf  
Steven Poast  
Morby Johnson*



# **FIND OUT HOW MUCH YOU REALLY MADE ON THE LAST PROJECT. CALL 1-800-275-2525 IN CONFIDENCE**

Profitability is nothing to guess about. That's why CFMS provides the only project-based accounting system that completely integrates all the numbers that are key to your firm's profitability from budgeting to final billing. And it's sponsored by the AIA.

Call 1-800-275-2525 today  
for a free demonstration.

HARPERANDSHUMAN

**HARPERANDSHUMANANDHARPERANDSHUMAN**

I want to know what we really made on our last project. Send me a FREE demonstration diskette today. ☐ 5 1/4" ☐ 3 1/2"

Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_ No. of Employees \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone \_\_\_\_\_

Harper and Shuman, 68 Moulton Street, Cambridge, MA 02138 VA

**HARPERANDSHUMANANDHARPERANDSHUMAN**

CFMS/VAX runs on Digital Equipment Corporation VAX computers. MICRO/CFMS runs on PC's and networks.

**digital**

Authorized Solution Provider

HARPERANDSHUMAN

**A WISCONSIN TRADITION OF  
QUALITY FOR OVER 80 YEARS**

**Brick  
Block  
Pavers  
Tile  
Stone**



THORO  
SYSTEM  
PRODUCTS, INC.



**Sonneborn**  
building products

**American  
Olean  
Tile**

**WISCONSIN  
BRICK & BLOCK  
CORPORATION**

6399 NESBITT RD MADISON, WI 53719  
(608) 845-8636 • (800) 362-6633  
FAX: (608) 845-8630

COMMERCIAL/INDUSTRIAL

**ENERGY EXPO 92**

**September 2 & 3, 1992  
La Crosse Center  
La Crosse, Wisconsin**

Call Gaye Jaenchen  
Director  
**1-800-292-9234**  
for further info.

**\* The Largest  
Energy Management  
Conference in the  
Midwest**

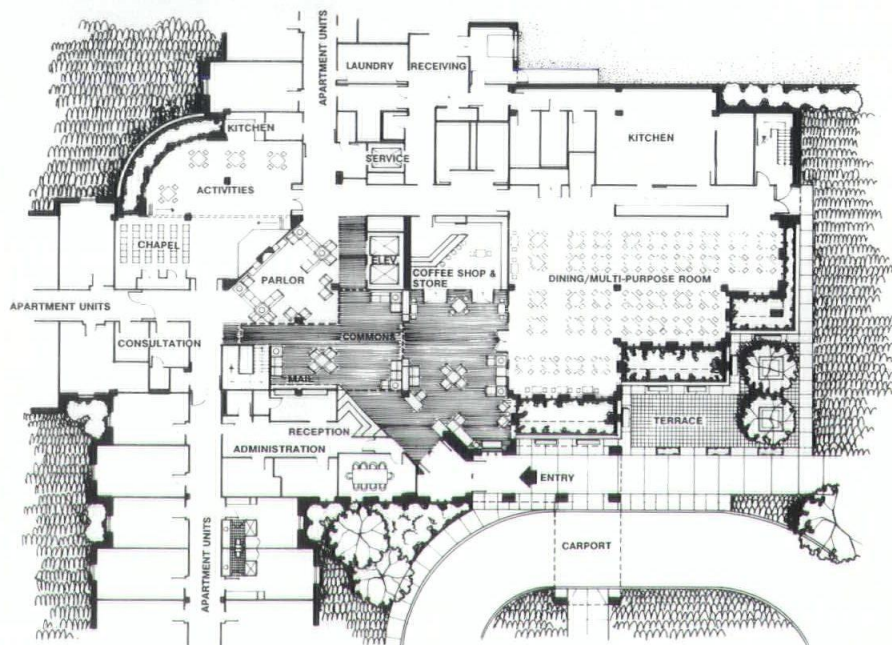
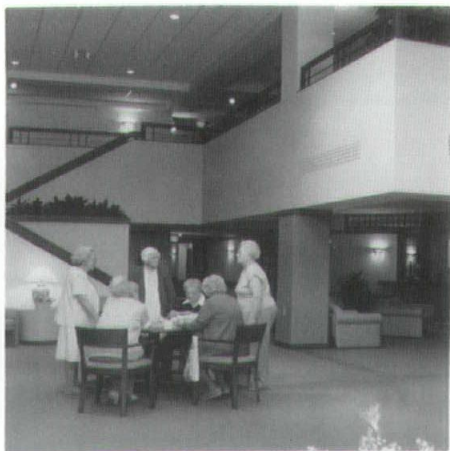
<i>Project</i>	<b>Villa St. Francis</b>
<i>Location</i>	<b>Milwaukee, Wisconsin</b>
<i>Architect</i>	<b>Flad &amp; Associates</b>
<i>General Contractor</i>	<b>C. G. Schmidt, Inc.</b>

In a southeast Milwaukee neighborhood, Villa St. Francis was created as an assisted living residence for persons making the transition from living in their own homes. The environment was to be warm and comforting; cost was required to be affordable for low and moderate income groups.

Size of the site was restrictive. An industrial warehouse was located to the west, day care center to the east, parking lot to the north and a residential area to the south.

A living room and parlor area with fireplace provides the focal point for gatherings of many kinds. Other features of the commons area are dining room, coffee shop and store, chapel and activities kitchen. The facility includes 144 studio and one bedroom units in a variety of flexible configurations. Some include kitchenettes and sinks designed so they can be combined. Though elevators are provided, a grand staircase and corridors with resting areas encourage walking.

*Photography: Joseph G. Paskus*



Ground Floor Plan

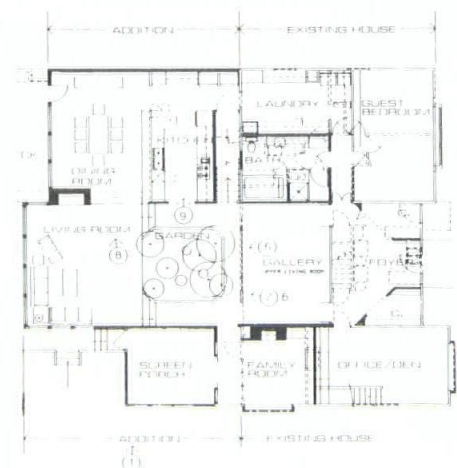
**Project****Residential Addition & Remodeling****Location****Middleton, Wisconsin****Architect****Solner and Associates****General Contractor****Francis Ziegler**

Within five years after purchasing the 30 year old, single story lake home, the owner initiated an addition and renovation. The planning of the residence provided an indoor garden as the core of the home, preserving the flow of sunlight into the ground level area, now an art studio, and allowing a generous indoor space surrounded by the living, dining, kitchen, gallery, family rooms and home office.

Outdoor balconies and decks provide an extension of the house toward the lake and its activities. To locate the owner's office at the residence, the existing single car garage was converted into a conference area. A loft was built above, overlooking the garden area. Master bedroom is built over the dining room and optimizes the lake view.



Photography: Handels Photography

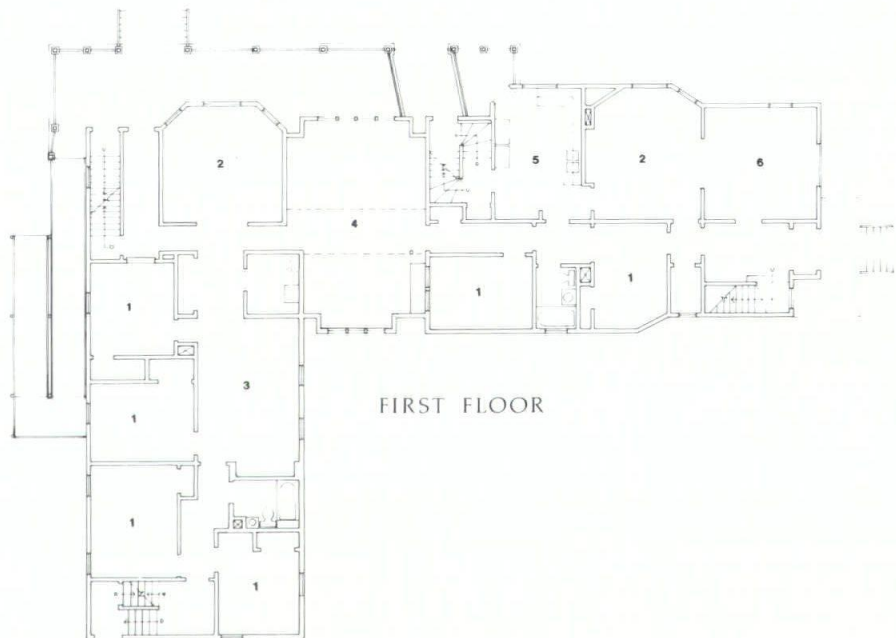
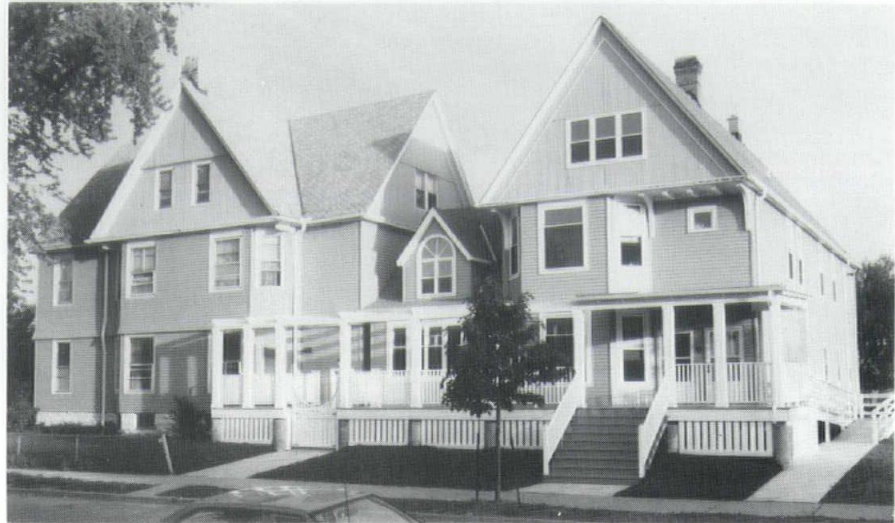


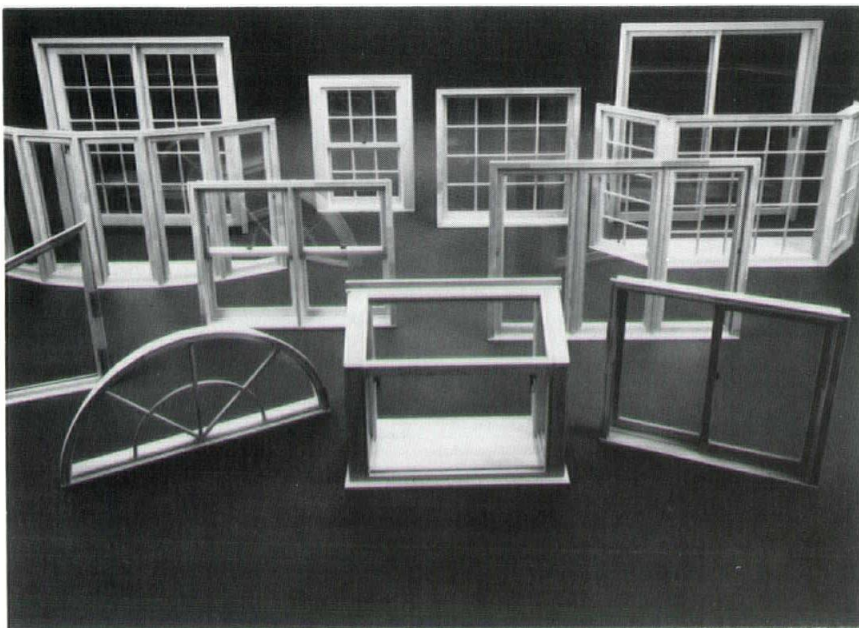
**Project****Horizon House Connection  
and Renovation****Location****Milwaukee, Wisconsin****Architect****Schroeder Piwoni, Inc.****General Contractor****Milwaukee Construction and  
Rehabilitation Cooperative**

This community-based residential facility provides shelter and counseling for women with drug dependencies. Twenty residents stay for up to six months each. The provider cultivates an image of steadfastness, commitment and stability. The availability of a duplex on an adjoining lot provided an opportunity to expand. The connection is a large two-story room, a communal dining/meeting space with a second level open bridge. From below, the bridge serves to subdivide the room into a larger porch side space and an adjacent south alcove. This provides the flexibility to accommodate small, medium and large groups graciously. A new north porch unifies the two structures visually.

Ultimately, reestablishing self respect and strong family values is the serious work of this provider. They intuitively recognized that the "sheltering" image of a large "house" was the appropriate setting for the reawakening of these human values.

*Photography: James Piwoni, AIA*





## HERE IN ITS SIMPLEST FORM IS A MARVIN WINDOWS CATALOG.

Most window manufacturers make just a few standard shapes and sizes. Marvin offers you thousands to choose from. With everything from authentic divided lites to Round Tops.

All Marvin windows are constructed of fine-grained Ponderosa pine. This wood was chosen for its excellent insulating properties and the way it accepts a stain-and-varnish or paint finish.

A variety of glazing options are available, including insulating glass and special energy-saving Low E glass. So

heating and cooling costs are significantly reduced. What's more, Marvin windows are carefully weatherstripped to eliminate drafts and further reduce energy loss.

And you don't have to wait a long time to have your windows made to order. Delivery is usually within three weeks from the time they receive the order.

Call or stop in today for complete details on Marvin Windows.



**builders world, inc.**

p.o. box 881 • waukesha, wisconsin 53187 • (414) 542-8883

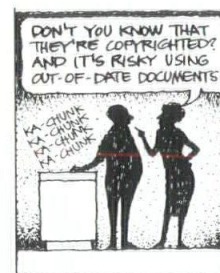
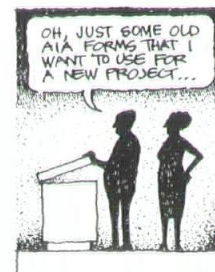
## THE SOLUTION IS IN YOUR HANDS

Looking for a way to reach more potential customers? If your business provides services and/or products to architects, engineers, contractors and others in the design and construction industry, advertising in Wisconsin Architect is a great way to reach the people you need to reach. At a surprisingly low price.

For more information, please call (608) 257-8477, or write:

Advertising Manager  
Wisconsin Architect  
321 S. Hamilton St.  
Madison, WI 53703

## Small Change Could Cost You Big Dollars



by Mark Lane, F.A.A.

Copying blank AIA Documents is illegal... and dangerous. The AIA Documents are revised periodically to reflect current case law and the ever-changing practices within the construction industry. Copying an outdated AIA Document—that's missing even a *small* change or revision—increases your liability and the possibility that you'll pay big dollars to settle a dispute. Don't take chances; order your current AIA Documents from us today.



**documents**  
THE AMERICAN INSTITUTE OF ARCHITECTS

The Wisconsin Society of Architects  
321 S. Hamilton St.  
Madison, WI 53703  
(608) 257-8477

AIA Documents the foundation for building agreements

©1991 AIA

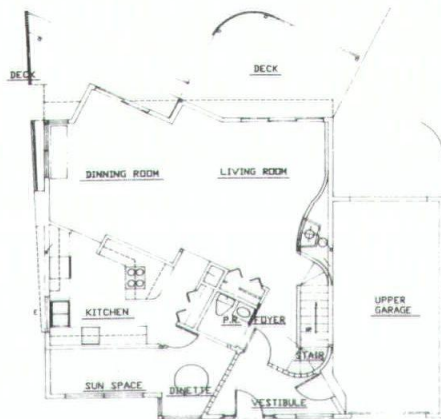
<i>Project</i>	<b>New Residence</b>
<i>Location</i>	<b>Madison, Wisconsin</b>
<i>Architect</i>	<b>North Design</b>
<i>General Contractor</i>	<b>Northland Homes</b>

This new residence for a family of three is located in the University Heights Historic District. The area contains mostly turn-of-the-century single-family homes. Some are quite large and of architectural significance.

With a steep topography, the lot was a challenge. It is 100 feet in depth with a 20 foot drop away from the street. Of the 60 foot width, 18 feet had to be devoted to side yards. Consideration had to be given to existing mature trees.

In the resulting four-level scheme of the house, most living and sleeping needs are provided on second and third levels. Each level has outdoor patio or decks to take advantage of the various views offered through the trees at various seasons. Passive solar heating and cooling features were incorporated making use of the south front of lot.

*Photography: Dan Felos*



FIRST FLOOR PLAN



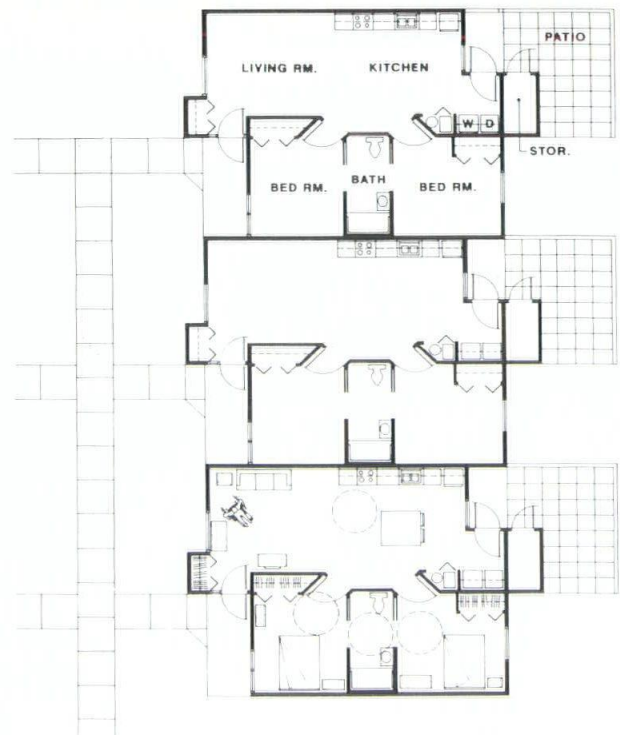
<i>Project</i>	<b>Willo Apartments</b>
<i>Location</i>	<b>Oshkosh, Wisconsin</b>
<i>Architect</i>	<b>HGM Architecture, Inc.</b>
<i>General Contractor</i>	<b>R. J. Albright, Inc.</b>

The purpose of this project was to relocate chronically disabled clients from nursing homes and parental care to their own apartments. Some required limited assistance and some 24-hour supportive care.

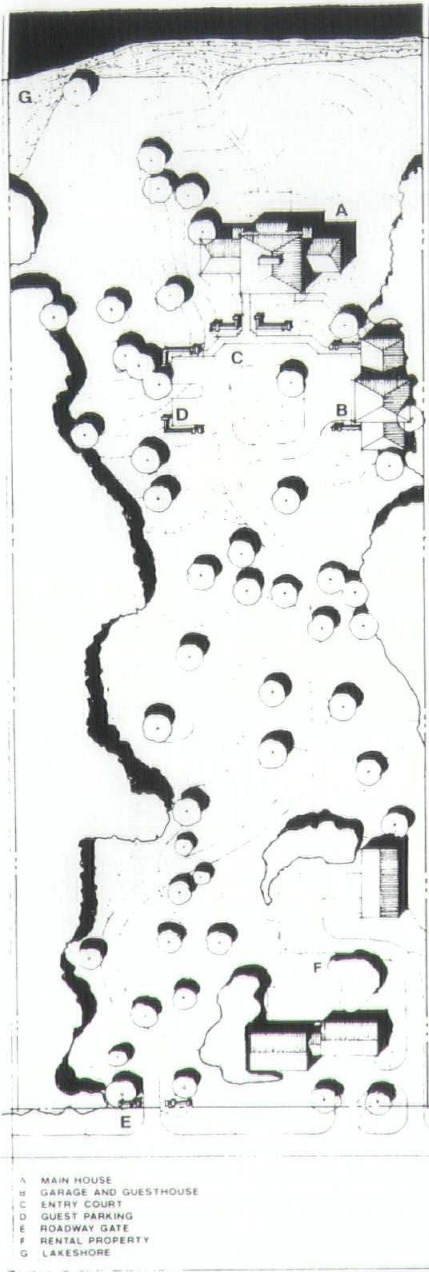
Twelve individual apartments are designed barrier-free to accommodate easy wheelchair maneuvering. Interior sliding doors use special hardware unobstructive to wheelchairs. Roll-in showers have low level water control. Kitchen pantries have doors and rollout shelves; ovens and microwaves are wall-mounted and light switches and environment controls are lower than standard level. Cooktops replace conventional stoves for roll-under access.

Each apartment has a back door leading to a private patio and access to a back yard which is maintained as part of the rent, similar to condominium style. Rent is based on ability to pay and is subsidized by UCP.

*Photography: Rick May*



<i>Project</i>	<b>Guest House and Garage</b>
<i>Location</i>	<b>Delavan Lake, Wisconsin</b>
<i>Architect</i>	<b>Charles J. Quagliana, AIA</b>
<i>General Contractor</i>	<b>Lavern Olson</b>



A MAIN HOUSE  
B GARAGE AND GUESTHOUSE  
C ENTRY COURT  
D GUEST PARKING  
E ROADWAY GATE  
F RENTAL PROPERTY  
G LAKESHORE

This 1905 Prairie Style two-story structure was the last of the Delavan Lake group designed by Frank Lloyd Wright. He had designed five summer residences along the south shore of Delavan Lake between 1897 and 1905. When purchased by the current owners in 1980, the house was in poor condition and needed extensive remedial work.

A master plan for the house and six-acre site was developed. An exterior and interior rehabilitation project followed which converted the structure from a summer home to year-round residence.

The new guest house and garage imitates roof forms and massing but contrasts the original with its asymmetrical plan, absence of corner windows and use of contemporary building materials. The long entrance drive was relocated as originally planned by Wright; a guest parking area and entrance courtyard was designed to link the two structures together visually.

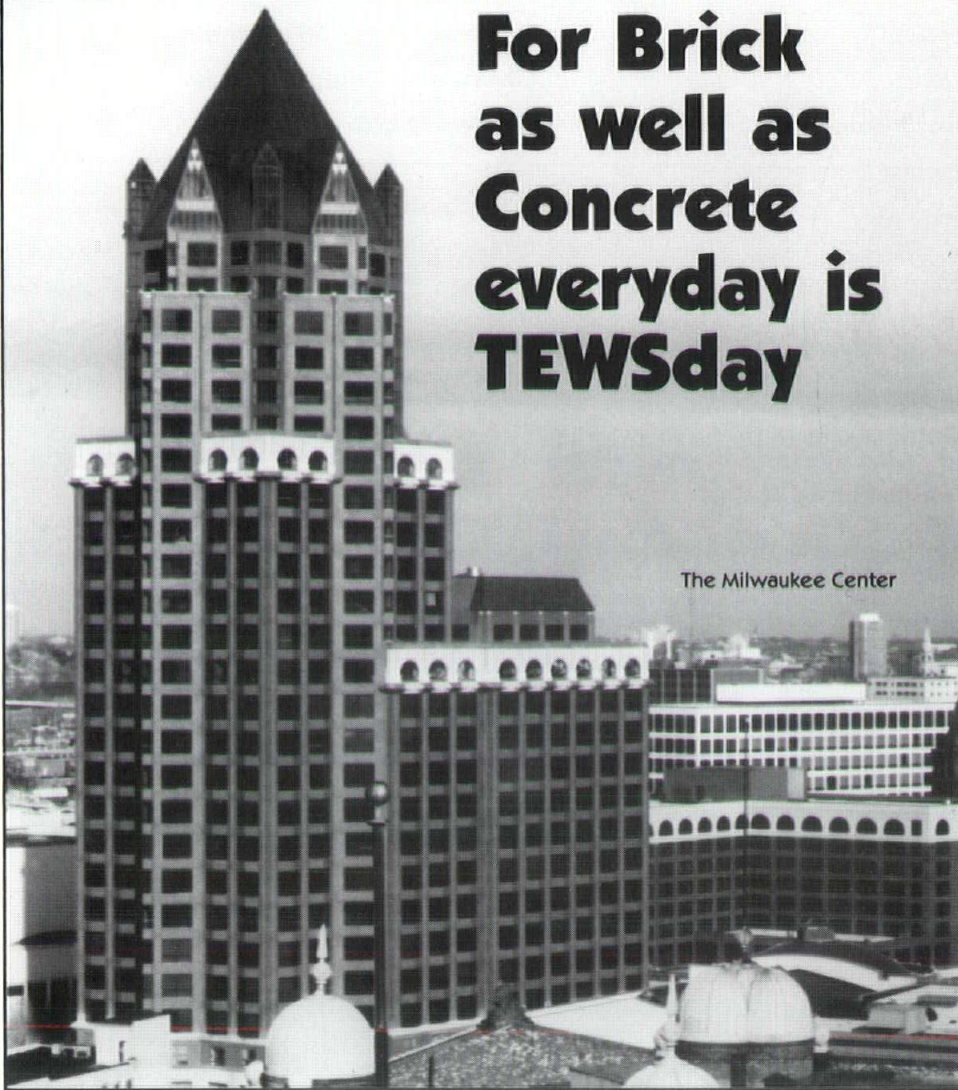
John Mickow was the structural consultant and Robert Hodgson was landscape architect for this project.

*Photography: Charles Quagliana, AIA*



**For Brick  
as well as  
Concrete  
everyday is  
TEWSday**

The Milwaukee Center



**TEWS**  
Company

**Contractor Supply Center**  
7200 South 10th Street, Oak Creek, Wisconsin  
**414/764-8700 Toll-free 1-800/686-8401**

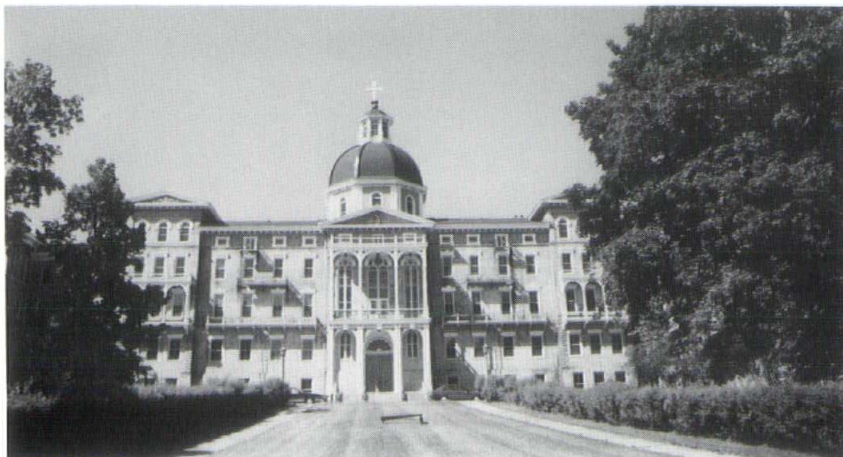
**WISCONSIN**

**Building a better  
Wisconsin through  
architectural education**

**ARCHITECTS**

321 South Hamilton Street  
Madison, WI 53703.3606  
1.608.257.8477

**FOUNDATION**



**St. Francis Seminary - Henni Hall, Milwaukee, Wisconsin**  
General Contractor: Voss-Jorgensen-Schueler Co., Inc.  
Architect: Eppstein, Keller, Uhen Architects

An artistic expression of our  
expertise - to fashion metal &  
glass to perfection

**Architectural Windows**

**Window Replacement**

**Translucent Panels**

**arwin**

**Arwin Builders' Specialties, Inc.**  
2145 South 162nd Street  
New Berlin, WI 53151  
(414)782-1090  
1-800-876-1090

*Project*

**La Tour Apartments**

*Location*

**Madison, Wisconsin**

*Architect*

**HSR Associates, Inc.**

*General Contractor*

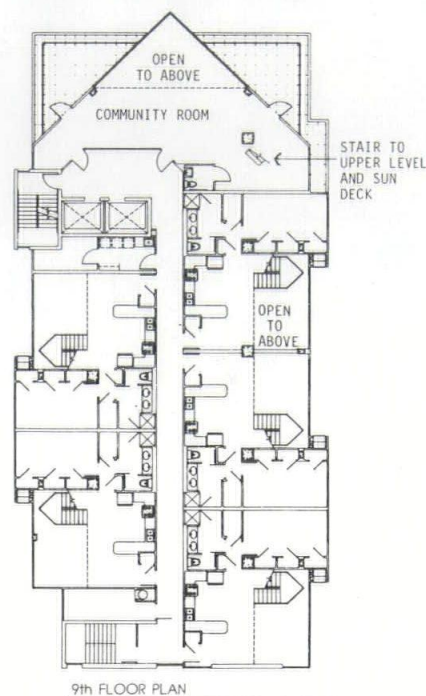
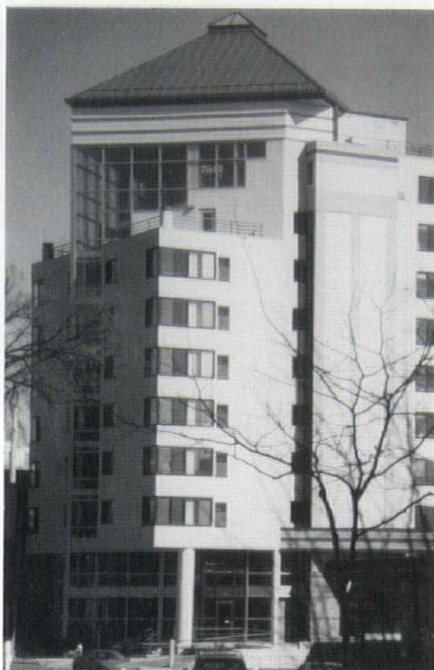
**Wilmac Construction, Inc.**

In an area to be developed for higher density student housing, this building is located on a major traffic street near the campus. The area is a transition point from 2- and 3-story residential and commercial to 10 story campus buildings. The higher levels offer dramatic views of campus, city and lakes.

A band of projected glass slices up the front of the tower, culminating in an open glass community space capped by a pyramid metal roof. This dramatic detail suggests youth and vigor and shows up as an eye catcher at night.

The street level entrance was designed at a comfortable human scale to welcome students and give a feeling of place. Apartment plans vary to give a sense of individuality.

*Photography: Stephanie Edwards*





**Structural Integrity  
Thermal Stability  
Fast Installation**

# BUILD WITH CONTROL.



**R-CONTROL PANELS,  
THE ENGINEERED SYSTEM  
FOR CUSTOM HOMES.**

Structural walls and roofs demand unyielding strength, fast installation and permanent R-value. Typical building methods and materials can't fill these requirements. The solution? R-Control panels. The rigid EPS building panels that meet national structural and fire testing standards.

**STRUCTURAL INTEGRITY.** A thick core of rigid EPS, expanded polystyrene insulation is adhesively welded between stranded lumber facings. The result is a solid, monolithic structure with the strength of a continuous column. No twisting, warping or racking.

**THERMAL STABILITY.** The R-value of EPS remains stable for the life of the structure. EPS contains no CFC's.

**FAST INSTALLATION.** R-Control is made and assembled with familiar wood components. A complete package is delivered ready to install. Houses are closed up in hours.

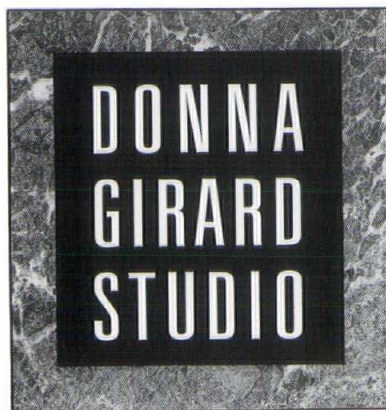
R-Control is a trademark of AFM Corp.

**WISCONSIN EPS, INC**

P.O. Box 669

90 Trowbridge Dr., Fond du Lac, WI 54936

Phone 414-923-4146



**Donna Girard  
Decorative Artist**

Wall Glazing  
Faux Finishes  
Metal Leaf Gilding  
Sky/Cloud Ceilings  
Marbleized Columns  
Murals

2826 Ville du Parc Dr.  
Mequon, WI 53092  
414-242-4708

## Small Change Could Cost You Big Dollars



—by Roger B. Lewis, FAIA

Copying blank AIA Documents is illegal...and dangerous. The AIA Documents are revised periodically to reflect current case law and the ever-changing practices within the construction industry. Copying an outdated AIA Document—that's missing even a *small* change or revision—increases your liability and the possibility that you'll pay big dollars to settle a dispute. Don't take chances; order your current AIA Documents from us today.

FULL  
SERVICE  
DISTRIBUTOR

**documents**  
THE AMERICAN INSTITUTE OF ARCHITECTS

The Wisconsin Society of Architects  
321 S. Hamilton St.  
Madison, WI 53703  
(608) 257-8477

AIA Documents the foundation for building agreements

©1992 AIA

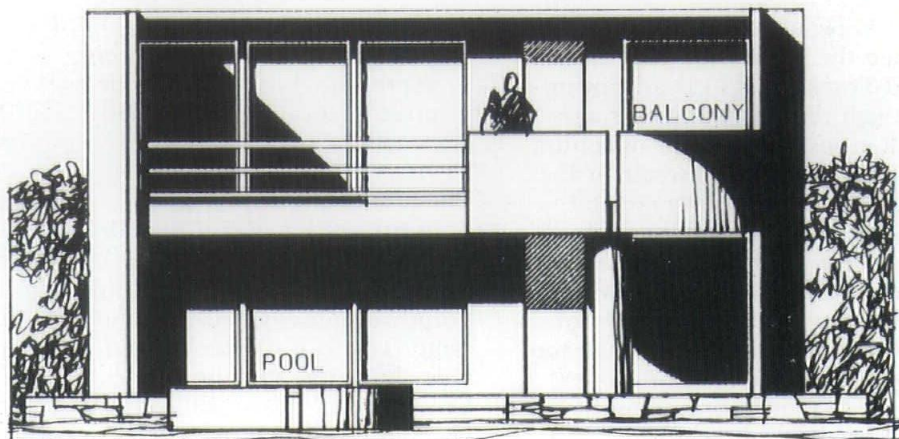
<i>Project</i>	<b>Addition to Residence</b>
<i>Location</i>	<b>Middleton, Wisconsin</b>
<i>Architect</i>	<b>Solner and Associates</b>
<i>General Contractor</i>	<b>Carpenter Construction</b>

The owner of this narrow lake property wanted an open-to-the-lake feeling with privacy from neighbors and a house to be designed in the International Style.

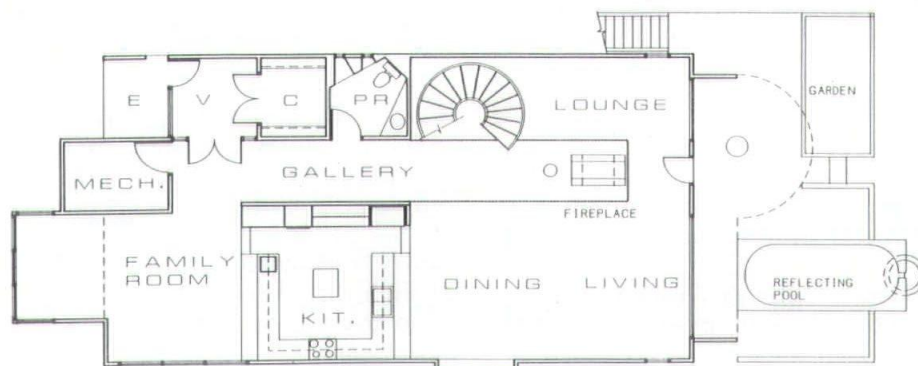
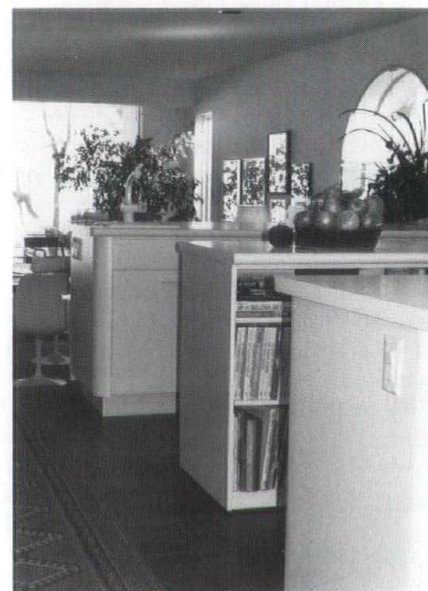
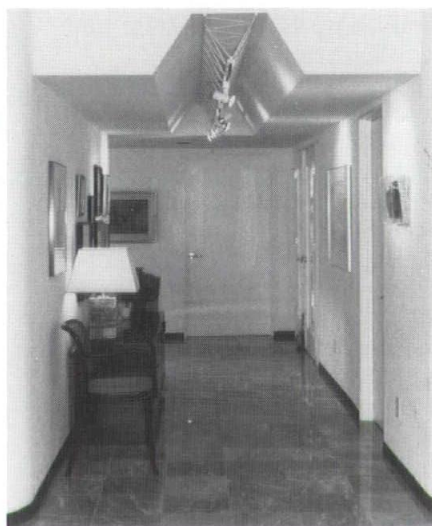
An old one-story cottage occupied the site. A recent two-story bedroom addition had been built on the street side. The achieved design solution required the cottage to be removed and replaced by a two-story addition. The new part provides an entertainment area on the lower level with master bedroom above. The kitchen was remodeled and an upper level study and guest bedroom added. The window in the dining area is frosted for privacy and illuminated with neon. This is a southern exposure with neighboring house about six feet away.

To further enhance this limited lot, an elongated reflective pool is set in the patio between the living room and the shoreline of the lake.

*Photography: Harry Krueger*



LAKE SIDE ELEVATION



MAIN FLOOR PLAN

## LRT, Buses, or More Pavement Transit Alternatives for Southeast Wisconsin

The Milwaukee media continue to create the impression that Light Rail Transit (LRT) is advancing through the pre-planning stages with a possible date of operation in 1997. This is the result of the attendant media coverage and follow up of two major initiatives—the *Southeastern Wisconsin Transit Corridor Studies* (May 1991) completed by the City of Milwaukee and the *Recommendations of the Metro 2020 Policy Board* (a Governor-appointed advisory committee).

The sequel study to the earlier studies (which both endorsed light rail) includes a wide angle second look at two other options. At a series of public meetings held in early April, the State of Wisconsin Department of Transportation outlined three proposed transit options for consideration as part of a \$2.3 million state-funded study to be administered by the Department of Transportation's Office of Transit System Development in conjunction with the Milwaukee Transit Associates (MTA), a joint venture of Howard Needles Tammen and Bergendorf, Parsons Brinkerhoff Quade & Douglas and SEC Donohue.

The three options are described as follows:

1. **No-Build**—Continue to build, improve and maintain the existing transportation system of interstate expressways, state highways and local bus transit.
2. **Express Bus**—Improve express bus service by construction of high-occupancy vehicle lanes on both sides of freeways, bus park and ride lots and transfer stations.
3. **Light Rail**—high tech version of the trolley—interurban with one to three cars using overhead wires operating in

separate boulevards or rights of way (and in the streets where appropriate). Service can be express or local for up to 450 people.

The title of the sequel study, *Milwaukee East-West Corridor Transit Study*, gives credence to the fact that the location of this proposed improvement remains the same. This is a corridor about two miles in width, starting at the University of Wisconsin-Milwaukee and proceeding west to downtown Waukesha. Transit plans within this corridor will require coordination with 14 local governmental units, as well as state and federal agencies.

To recap: The purpose of the study is to identify and evaluate alternative transit options such as light rail and express bus service for the Milwaukee East-West Corridor that could reduce traffic congestion, improve air quality and mobility to jobs and stimulate economic development.

The purpose of the \$2.3 million state-funded study is to recommend a transit alternative which is designed to accomplish the following:

1. Reduce highway congestion in the East-West Corridor.
2. Improve worker transportation to jobs.
3. Improve air quality and meet federal clean air mandates.
4. Decrease energy consumption and reliance on oil-based fuels.
5. Support new development and revitalization efforts.
6. Encourage efficient land use.

Commentary at two public meetings represented a broad spec-

trum of opinion on the subject of transit.

Most agreed that the current bus system with routes designed like the spokes of wagon wheel to serve downtown is no longer a viable alternative to our current expressway transportation system. It's difficult for buses with long routes and traffic delays to compete with 20 minute mobility in Milwaukee. However, most attendees indicated there are increasing problems with congestion on the freeway system which slow down cars and buses alike.

Commentators responded to DOT's request for input by indicating that a viable transit alternative have the following qualities:

1. High frequency of service with short waiting intervals of no more than 10 minutes between boardings.
2. Destinations with high demand like regional medical centers, shopping centers, Zoo, Stadium, Bradley Center, PAC, downtown Waukesha and the Wauwatosa Village area which are in high demand.
3. Cars and stations which are visually appealing and non-polluting.
4. Feeder bus service to and from stations along the express route of either bus or light rail to improve accessibility.

Funding is available as a result of \$151 billion six-year transportation plan to overhaul the nations highways and transit system enacted by Congress in November 1991. The bill shifts control of transit alternatives to states and localities with overlay requirements for development of a comprehensive plan as a requirement for funding.

Highlights include: \$24 billion for surface transportation, an additional \$31.5 billion for transit including \$5 billion for 57 new rail and bus systems, \$6 billion to address urban congestion and air quality, and \$3.6 billion for transportation enhancements including historic preservation, bicycle and pedestrian facilities and scenic easements. The same federal match for both highway and transit projects of 80%/20% ensures that highways are not the only "fiscally reasonable choice" because of funding standards. In addition, Wisconsin may be eligible for so called "rediscovered monies" which are funds not expended for Milwaukee County freeway work in the 1980s.

With Milwaukee's freeway system operating at peak capacity now for several hours a day—predictions for the year 2000-2010 of three lanes of gridlock highways suggest that a "balanced transportation system is highly desirable." With Milwaukee's fairly high level of bus ridership at the present time, the issue to be resolved is: Which alternative will be more effective in achieving the program goals of a viable transit system?

Based upon costs, the price tag of \$24 million per mile of light rail versus \$30 million per mile for two additional HOV lanes, light rail indicates that is clearly the less expensive alternative.

New LRT systems are operating in San Diego (1981-1989), Buffalo (1986), Portland, Oregon (1986), San Jose, California (1988), and Los Angeles (1990). New systems are under construction and scheduled for completion in Baltimore (1992) and Dallas (1996). According to *"The New Electric Railway Journal"* quarterly publication which provides a critical look at the electrical

railway industry, LRT is an important element in balanced transportation in America's metropolitan communities. High occupancy vehicle lanes were recently built in Los Angeles and Minneapolis.

One of the most successful LRT systems developed is the former Shaker Heights Rapid Transit—a comprehensive system of light rail designed to travel from downtown Cleveland to its suburban environs via routes which are underground, overhead and on separate right-of-ways including landscaped boulevards. The transit system was coordinated with land use planning.

This major suburban district of 8,000 acres developed from 1915 until the present time with housing, offices, commercial centers and community services carefully included in the overall comprehensive plan.

At major transfer points, between buses and light rail, commercial centers were developed. At more urban stops, medium density housing was encouraged in the form of low-rise apartment buildings and condominiums. At the end of the line are car parks which encourage park and ride as well as bus transfers. Along the boulevard are neighborhoods of homes ranging in density from four homes per acre to one home per acre. This system was well planned to attract ridership to pay its mortgages by the late 1940s, after 25 years of operation. The entire system was rebuilt and upgraded in the mid 1980s and is now state of the art with new cars, trucks, overhead wires and stations.

The Shaker Heights Transit is a successful example of coordinating LRT with land use in a northern climate. In California, new LRT systems were developed in the 1980s to focus city planning. Most

notably in San Diego, the LRT system has been a magnet for real estate development where office towers are built over the air rights of downtown transfer stations. In the suburbs, commercial centers and moderate density development are encouraged at major stops as an alternative to suburban sprawl.

Clearly, light rail represents a fixed capital investment which creates value along its route because the system provides access and is dependable and long term. While buses can provide express service, they lack significant fixed capital investment and tend to not encourage investment along their routes or at end points.

The issue remains on the table at this point whether to spend more funds for transportation in one of the following ways:

1. More interstates, interchanges and highways with more sophisticated traffic control systems;
2. Express buses in reserved lanes; or
3. Light rails with 450 persons in three cars operating on dependable, highly frequent schedules on permanent routes.

The Office of Transit System Development has requested input on these alternatives. They have asked local governments, community organizations and citizens to address the issues—they say the choice is ours and the opportunity for input is now!

Send your comments immediately to:

Mr. James A. Beckwith  
Transit System Development,  
WISDOT District 2  
141 N.W. Barstow Street  
Waukesha, WI 53187

# CLASSIQUE™ elevator. Ideal for homes or condos.



- Affordable and elegant addition.
- Ideal when stairs are a problem.
- Can be installed where space is limited.
- Installed in new or existing dwellings.
- Oak paneling with choice of Natural Oak, Pennsylvania Cherry, or Antique Walnut finishes.
- Exclusive 2-year warranty.

*Ask about other Cheney products.*

FOR FREE BROCHURE, WRITE OR CALL:

**1-800-782-1222**  
**IN WI 1-800-552-7711**

*Freedom of Movement™*

**CHENEY** 

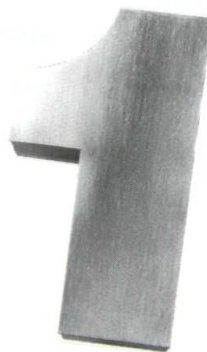
Dept. WA0592 P.O. Box 51188  
1445 South Calhoun Rd., New Berlin, WI 53151



**SFC/SMC Series**  
Light on the wall, from the wall. Or both. Indirect versatility is the asymmetric superiority of the SFC/SMC Wall Sconce Series. Die-cast aluminum with translucent white-acrylic or spun-aluminum bowl, lampings through 400W MH. For any diverse space, the choice is SPI.

**SPI**  
SPI Lighting Inc.  
10400 North Enterprise Drive  
Mequon, Wisconsin 53092  
414 242 1420

**When it comes to  
great fabrication  
our reputation**



**is stainless.**

Our reputation is stainless by design. We're the Sheet Metal Contractors of Milwaukee, whose shining products are seen all over the city, from fancy duct work to monumental architecture. Sheet Metal is better by design!

Sheet Metal Contractors  
of Milwaukee  
2515 North 124th Street  
Suite 200  
Brookfield, Wisconsin 53005  
(414) 784-6889

**SMC**  
Sheet Metal Contractors  
of Milwaukee

## Cost Estimates

It isn't nice to contemplate, but an architect may be subject to liability for substantially underestimating the cost of construction when the client has clearly made cost an important consideration for the project.

The law generally applicable to disputes concerning an architect's estimate can be found in 5 Am. Jur. 2d, Architects, § 7, § 23, p. 685, as follows:

"An architect who substantially underestimates, through lack of skill and care, the cost of a proposed structure, which representation is relied upon by the employer in entering the contract and proceeding with construction, may not only forfeit his right to compensation, but may become liable to his employer for damages. However, one to whom an architect gives an estimate of cost may not recklessly proceed to make contracts which make the cost of construction far above that estimated and then hold the architect responsible for the surplus expenditure."

The subject matter of cost estimates has been covered by the Standard AIA B141 documents for many years, and it is helpful to focus upon the 1987 edition of B141 in order to better understand the impact of those provisions on the subject of cost estimates by the architect.

Subparagraphs 2.2.5 (Scope of Architect's Basic Services), 2.3.2 (Design Development Phase) and 2.4.3 (Construction Documents Phase) of B141, 1987 Ed. all speak of the architect's "preliminary estimate of construction costs." Under those paragraphs, the architect agrees to submit to the owner a preliminary estimate of construction costs based on current area, volume or other unit cost and update that preliminary estimate during the design development phase and the construction documents phase of the project. When, if ever, that estimate is no longer "preliminary" is not clearly explained. However, Subparagraphs 3.4.10 and 3.4.11 provide that the architect will, as optional additional services, furnish the client with a detailed estimate of construction cost or a detailed quantity survey or inventory of material, equipment and labor.

The 1974 and 1977 editions of B141 called the preliminary estimate a "statement of probable construction cost," as did the 1967 and 1970 editions of B131. The 1963 edition of B131 referred to it as a "statement of probable project construction cost." The AIA commentary to the 1987 edition of B141 attempts to clarify that a preliminary estimate of construction cost estimate is not a guarantee and is certainly not a "fixed limit of construction cost" as provided for in Paragraph 5.2. Subparagraph 5.2.1 clarifies that a preliminary estimate of construction cost is not a warranty or representation that the owner's

project budget can be met. AIA suggests that if your client wants more than a mere estimate based on developing considerations of project scope and quality, the client should hire a cost consultant to give specific cost advice. Obviously, what kind of estimate the client expects may depend upon the expressed intention of the contracting parties during negotiations. While B141 attempts to disclaim responsibility for the accuracy of a preliminary cost estimate, if the client communicates to the architect at the time B141 is being negotiated that cost estimates are important to the client, the client may regard the meaning of the phrase "preliminary estimate of construction cost" as being something for which the architect is accepting accuracy.

When disputes arise between clients and architects regarding the legal significance of such cost estimates, legal theories will be advanced by the client's lawyer that stand for the proposition that accuracy of the cost estimate is a condition of the architect's right to collect his or her fee. The client will argue that he or she had no intention of paying for architectural service that couldn't be used. Under some circumstances, the client may even claim that the architect was informed as to other damages the client would face if the project was not economically viable, exposing the architect to a client's claim for recovery of lost opportunity damages.

In order to obtain the protection of the 1987 edition of B141, such as it offers, it is important for the architect to avoid making any representations or promises, oral or written, that may tend to support the client's argument that the architect was fully informed of the client's heavy reliance on the accuracy of a preliminary estimate of construction costs or of the client's unique needs or expectations that might support a claim for lost opportunity damages. Indeed, the architect should clarify in writing or orally as the situation requires and emphasize that the preliminary estimate of construction cost is for general information only and not intended to be an accurate prediction of construction costs, and that it is subject to the changing scope and quality of the project, the changing nature of market conditions, the unpredictability of construction bids and changing client requirements. Any oral or written communication from the client that signals a greater reliance upon the preliminary estimate of construction cost than the architect believes appropriate should be met with immediate written clarification by the architect.

However, under the 1987 edition of B141 the architect may agree to be bound by a fixed limit of construction costs under Article 5. Subparagraph 5.2.2 provides that the client and architect may agree in writing that the architect will be bound by a "fixed limit of construction cost." The AIA commentary suggests that such a written agreement to be bound by a fixed limit of construction cost should be in the form of a

separate written document signed by both parties or by a separate written reference in Article 12 of B141. If the architect agrees to adhere to a fixed limit of construction costs, the architect is permitted by Subparagraph 5.2.2 to include contingencies and to unilaterally make "reasonable" adjustments in the scope of the project and to seek alternate bids. If the lowest construction bid or negotiated construction proposal ultimately exceeds the fixed limit of construction cost, under Subparagraph 5.2.4, the client shall either give written approval of an increase in the fixed limit, authorize re-bidding or renegotiation of the project within a reasonable time, abandon and terminate the agreement, or cooperate in revising the project scope and quality to reduce the construction costs. If the client chooses to attempt to reduce the construction costs by revising the project scope and quality, the architect under Subparagraph 5.2.5, is required to revise the plans and specifications at his or her own expense and without additional compensation.

Clearly, the subject of construction cost estimates is difficult for the architect to handle. Full disclosure to the client of the architect's intentions and of the architect's understanding of the meaning of the terms in B141 will prevent the owner from relying upon misunderstood expectations. Nothing prevents an architect from clarifying the subject matter further by written definitions and disclosure inserted in Article 12 of B141.

*EDITOR: The author is an attorney with the Madison law firm of Kay & Eckblad, S.C.*

## WSA Design Awards

Congratulations to the award-winning architects, owners and contractors involved in the eight projects selected to receive 1992 WSA Honor and Merit Awards. This year's award-winning architecture runs the gamut of building types, ranging from corporate headquarters to a frozen custard stand.

The architects and projects receiving WSA Honor Awards include: Hammel Green and Abrahamson, Inc., Milwaukee, for the *920 South Waukegan Road Commercial Building* in Lake Forest, Illinois; and Potter Lawson Architects, Madison, for *Integrity Mutual Insurance Company* in Appleton.

The architects and projects selected for WSA Merit Awards are: Kubala Washatko Architects, Inc., Cedarburg, for *Jacobson Rost Advertising Agency* in Sheboygan; *Kopp's Restaurant* in Brookfield; and *Washington House Inn* in Cedarburg; Kenton Peters + Associates, Madison, for *Covenant United Methodist Church* in Fond du Lac; and the Zimmerman Design Group, Milwaukee, for *Stationside Village* in Kenosha and *West Bend Mutual Insurance Corporate Headquarters* in West Bend.

In addition to the two Honor and six Merit Awards, the following five architects also received Honorable Mentions for successful building projects: Hammel Green and Abrahamson, Inc., Milwaukee, for the *Italian Community Center*, Milwaukee; Kubala Washatko Architects, Inc., Cedarburg, for the *Sheboygan Dental*

*Clinic*, Sheboygan; Miller Wagner Coenen, Inc., Neenah, for *Lincoln Mill Apartments*, Appleton; Plunkett Raysich Architects, Milwaukee, for the *General Clinic of West Bend*, West Bend; and Prine Architects, Inc., Middleton, for the *First Presbyterian Church of Baraboo*, Baraboo.

The three jurors for the 1992 WSA Design Awards program were: S. Fiske Crowell, Jr., AIA, with Kallmann, McKinnell & Wood Architects, Inc., Boston; Steven M. Goldberg, FAIA, with Mitchell/Giurgola Architects, New York; and Diane Legge-Kemp, FAIA, Riverside, Illinois.

The jury selected the award-winning projects for 1992 from among 78 entries submitted by WSA-member architects. "The projects we examined were solid, well done, well detailed and had a certain sense of permanence and timelessness," the jury noted.

Presentation boards of the winning projects were on display at the 1992 WSA Convention in Madison. The awards were presented to the architects, owners and contractors at the WSA Honor Awards Banquet held in conjunction with the WSA Convention. The award-winning projects will be featured in the July/August issue of *Wisconsin Architect*.

## Licensing Rules

At its April meeting, the state Examining Board of Architects, Professional Engineers, Designers and Land Surveyors held a public hearing on several proposed administrative rules that would affect the future licensing of architects and practice of architecture in Wisconsin. The proposed rules were summarized as follows:

- **Section A-E 2.02 (7).** New technology in the fields of design as evidenced by computer-aided-design (CAD) requires the administrative code to address practices currently occurring in the professions. The rule clarifies an acceptable stamp and signature requiring an original seal or stamp on two-color ink. Computer generated images are not permitted.
- **Section A-E 3.03.** This section, which will become effective on January 1, 1993, is corrected to reflect changes in the intern development program (IDP) as modified by the National Council of Architectural Registration Boards and The American Institute of Architects. The administrative code provides the candidate with two routes in which to acquire the necessary pre-registration experience. The formal IDP is voluntary; therefore, it would be less confusing to candidates who have the ability to choose between the IDP which accurately reflects the national program rather than a "Wisconsinized" version and the existing route.
- **Section A-E 3.05 (2).** The amendment to this subsection allows candidates to begin the examination process in the final year of work toward completing their academic and experience requirements. This will allow candidates the eligibility to apply for registration immediately upon completion of education experience and the examinations.
- **Section A-E 3.05 (7).** Prior language restricted a candidate's ability to retake sections of the examination to a four year window after which the candidate was required to begin again,

taking all sections of the examination over at great cost in time and expense. The amendment removes the four year window restriction and allows the candidate to retake failed sections of the examination until all sections have been successfully completed. This removes a barrier to registration that most other state boards have previously removed.

- **Section A-E 3.06.** The administrative code for architect applicants has not been as clear regarding the application contents as some of the other design sections. This language models language contained in the administrative code applicable to the other professions governed by the board.

For further details and current status of these proposed rules, architects and interns may want to contact the Bureau of Business and Design Professions at the Department of Regulation and Licensing: Peter Eggert, bureau director, (608) 266-3423; Alfred Hall, administrative assistant, (608) 266-1399; and Jan Bobholz, licensing coordinator, (608) 266-1398.

### **AIA Documents**

The AIA documents program is one that members tend to take for granted since it has been around for as long as they can remember. AIA documents provide a vital point of departure for almost every kind of construction transaction and are a vital tool for your practice.

At its April meeting, the WSA Executive Committee appointed Brian Larson, AIA, Eau Claire, as Wisconsin's "State AIA Documents Coordinator."

Assisting Larson on a new WSA/AIA Documents Committee will be Steven Groth, AIA, and Warren Smith, AIA, both of Milwaukee.

The Committee will provide a link between WSA members and the national AIA Documents Committee. Its purpose is to forward your comments, questions and suggestions regarding AIA documents to the national committee and staff which work on document revisions as well as to communicate current document developments and upcoming revisions to WSA members and other users of AIA documents.

For example, the national AIA Documents Committee is interested in learning what changes, if any, you would like to see in the 1997 edition of A201. It is looking for issues that are not addressed—or not adequately addressed—in the current document. Your comments can be general or specific. Even if your comment on a particular provision is simply, "Don't change anything!" let a member of the WSA/AIA Documents Committee know your opinion.

You can reach WSA/AIA Documents Committee members by phone as follows: Brian Larson (715) 834-3161, Warren Smith (414) 299-1946 and Steven Groth (414) 272-2060. For a listing of mailing addresses, please contact the WSA office.

### **WAF**

Gary V. Zimmerman, AIA, President of the Wisconsin Architects Foundation, had the privilege of accepting two significant contributions at the recent WAF Annual Meeting held in conjunction with the 1992 WSA Convention.

Clarence Huettnerauch, AIA, FCSI, presented a check to the WSA in the amount of \$1,650 on behalf of the Milwaukee Chapter CSI. Since 1986, the Milwaukee Chapter CSI has contributed a total of over \$14,600 to support the WAF's scholarship efforts.

Dick Magliocco presented a \$1,000 contribution to the WAF on behalf of the Best Block Company. Best Block has consistently supported the efforts of the WAF to building a better Wisconsin through architectural education.

The WAF annually provides tuition scholarships to students pursuing graduate degrees at the UW-Milwaukee School of Architecture and Urban Planning. In 1991-92, WAF scholarships were awarded to the following students at SARUP: John Holz, Mark Zogg, Emad Mugattash, Ellen Malmon, Diana Dorschner, Catherine Gawlik and Stella Quinlan.

The WAF Board of Directors also has established a tuition scholarship for students in the Architectural-Engineering program at MSOE. This year, scholarships were awarded to two MSOE students, Murray Papendorf and Jeff Diqui.

For the past few years, Master Blue Print, Inc. of Madison has contributed to the WAF to support a tuition scholarship for the winner of the annual High School Student Design Competition sponsored by the Southwest Wisconsin Chapter of the WSA. The 1991 winner of this scholarship was Ryan Chandler of Madison.

The WAF is governed by a nine-member Board of Directors elected by the membership for three-year terms. At the WAF Annual Meet-

ing, the following individuals were elected to the WAF Board: Ronald G. Bowen, FAIA, Madison; Brian F. Larson, AIA, Eau Claire; and Gary V. Zimmerman, AIA, Hartland. Valentine J. Schute, AIA, La Crosse, and Orville E. Arnold, Madison, retired from the WAF Board and were recognized for their contributions on behalf of the WAF.

"The scholarship assistance provided by the WAF makes a significant difference to the students pursuing careers in architecture," Zimmerman noted. "This financial help is made possible by the tax-deductible contributions from people like you."

#### Ask DILHR

Q: Do truss-to-truss and truss-to-frame connections need to be specified on plans? If submittal is required, should connection selection be specified on the building plans or the truss plans?

A: Connector selection is required to be submitted and may be indicated on either the framing plan or erection plan. Properly signed and sealed framing plans are required with building submittal.

Erection drawings reflecting the framing plan may either be signed and sealed by an A/E or provided with a stamp and a building supervising professional signature indicating he/she reviewed the erection plan.

If the erection plan indicates changes from the framing plan, revised signed and sealed framing plans are required. [Information Notice Number 18, January 1992, *Wisconsin Building Codes Report*.]

Q: ILHR 50.10 requires that a supervising professional be retained by the owner for the performance or supervision of reasonable on-the-job observations. What types of observations are expected from a supervising professional?

A: Reasonable on-the-site observations may include but are not limited to the following:

- Site observation after excavation to verify soil conditions,
- Footing/foundation observation of the quality of concrete, size and depth of concrete elements, reinforcing bolts,
- Structural observation of materials used, connections, fire blocking and compliance with approved layouts.
- Fire assembly and enclosure observation of correct fire resistive assembly construction and proper grouting or sealing of penetrations in fire-resistive assemblies,
- Final observation to verify substantial compliance with the approved plans and related codes prior to the filing of a completion statement.

[Information Notice Number 41, February 1992, *Wisconsin Building Codes Report*.]

#### Residential Directory

A directory of Wisconsin architectural firms interested in residential projects, including one- and two-family homes, is now available from the WSA.

The popular *WSA Residential Directory* has been updated to include the name, address and phone number of 84 WSA member-owned firms that are interested and have expertise in residential work. The directory also includes tips on how to select an architect for residential projects.

For a free copy of the directory, write or call the WSA office: 321 S. Hamilton St., Madison, WI 53703; (608) 257-8477, or 1-800-ARCHITECT.

#### Annual Golf Outing

Cancel all of your appointments for June 29, 1992! That's the date for the WSA's 19th Annual Architect-Exhibitor Golf Outing. This special event is for WSA members and suppliers who exhibited at the 1992 WSA Convention.

This year's Golf Outing will be held at Old Hickory in Beaver Dam, Wisconsin. For more information, please contact Karen Linley at the WSA office.

#### WSA Citation

At its April meeting, the WSA Board of Directors voted unanimously to award Debra Cerra, Madison, a WSA Citation for Distinguished Service to the profession of architecture.

The WSA Board approved the Citation in recognition and appreciation of Debbie's willingness to consistently contribute her outstanding design skills to enhance the graphic image of many WSA and Southwest Chapter programs, documents and publications. Over the years, Deb-

bie has contributed significantly to the success of WSA Conventions, Design Awards programs, Fall Workshops and numerous other state and local Chapter brochures and award certificates.

WSA President Roger D. Roslansky, AIA, presented the WSA Citation for Distinguished Services to Debbie at the 1992 WSA Convention in Madison. Once again, congratulations!

### **VTAE Drafting Competition**

Winners of the 1992 VTAE Student CAD Competition sponsored by the WSA included the following students: Julie M. Nedland, WITC, *First Place*; James Dean Bourne, WITC, *Second Place*; and Dan Grubish, WITC, *Third Place*. The following students received Honorable Mentions in this year's competition: Brent A. Ferguson, WITC; Brent Greener, WITC; John Elrick, NWTC; and Howard Scott Kaufmann, WCTC. A total of 28 students from four VTAE Districts submitted drawings this year.

The WSA established this annual competition for students enrolled in architectural and civil structural drafting courses in Wisconsin's VTAE system. The goals of the competition are to open the lines of communication between WSA members and other groups and individuals involved in the planning of the built environment and to encourage excellence in technical training. The requirements of the competition are left open so the instructors and students can determine the information to be presented on the entry.

The winning entries were displayed on the exhibit floor at the 1992 WSA Convention. Thanks are in order for Kevin J. Connolly, AIA,

who coordinated the competition this year and the jurors...Gene Post, AIA, Robert Bouril, AIA, and Charles Western, Intern AIA.

### **People & Places**

The Frank Lloyd Wright Heritage Tourism Program has just produced a new guide that makes it easier to visit Wright designed buildings in Wisconsin. The guide, featuring seven Wisconsin buildings, was organized in association with the National Trust for Historic Preservation. To receive a free copy of the new guide, send a stamped, self-addressed business-size envelope to: Frank Lloyd Wright Heritage Tour, Route 3, Spring Green, WI 53588.

To celebrate the 125th Anniversary of Frank Lloyd Wright's birth, the Frank Lloyd Wright Foundation has scheduled activities around the country. The anniversary is June 8, 1992, so if you're planning a trip away from home, be sure to get a copy of the national calendar of events. Just send \$2 (to cover postage and handling) to Calendar of Events, The Frank Lloyd Wright Foundation, Taliesin West, Scottsdale, AZ 95261.

Frederick Loewen, AIA, Deerfield, has been advanced to Member Emeritus. Congratulations, Fred!

Russell La Frombois, AIA, Milwaukee, and Charles Simonds, AIA, Shorewood, have joined the firm of Engberg Anderson. They can be reached at 611 N. Broadway, Suite 517, Milwaukee, WI 53202; phone (414) 276-6600.

Chuck Western, Intern AIA, Madison, has been appointed to the national AIA Intern/Associate Network as the liaison for the

North Central States Region. If you have any questions, comments or suggestions regarding Intern and Associate membership programs, contact Chuck at (608) 836-9608.

### **Membership Action**

Please welcome the following new WSA members:

#### *AIA*

Thomas O'Connell, Southeast, Transfer/Illinois

Gregory A. Peterson, Northeast, Transfer/Ohio

Keith Strege, Southeast

Paul J. Witek, Northeast, Advancement

Mark K. Schuchardt, Northeast

Daniel R. Ferraro, Southeast

John T. Klick, Northwest

Michael G. Muller, Northeast

Charles D. Roger, Southeast

Brett Luecke, Southeast

Gary Durler, Southeast, Advancement

Steven J. Freson, Southwest

Rodney M. Coenen, Northeast

George R. Mattheis, Northeast

Thomas E. Stelling, Southeast

Richard B. Hiler, Southwest

Peter F. Pichotta, Southwest

Renee A. Kubesh, Southeast, Advancement

Russell R. McLaughlin, Southeast, Advancement

John J. Curran, Southeast

Robert M. Lambert, Northwest

#### *Associate*

Todd A. King, Southeast

Charles J. Sautner, Southeast

Patrick J. Conway, Northwest

Richard G. Herndon, Southwest

Clark C. Myers, Southeast

#### *Professional Affiliate*

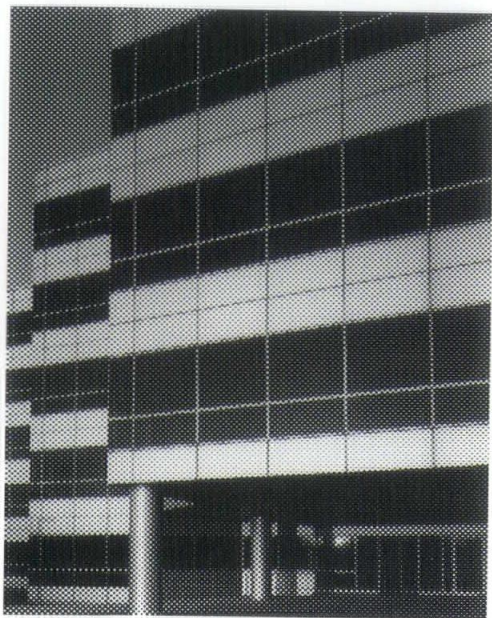
Leanne M. Meyer, Northeast

Robert A. Fuhr, Northeast

#### *Student Affiliate*

Tom E. Felton, Northeast

# Purcell Imaging



photography  
architectural • interior • computer generated

Represented by Halvorsen & Associates 414.821.1585

414.278.8290 FAX 414.278.7278

## PBBS EQUIPMENT CORP

5401 N. Park Dr., Butler, WI 53007

SINCE 1955

### BOILER ROOM

Service - Parts - Sales - Chemical - Engineering

**24 Hour Service**  
Radio Dispatched

INDUSTRIAL Large Parts  
COMMERCIAL Inventory

Cleaver Brooks

**FACTORY AUTHORIZED  
PARTS & SERVICE**

ALL MAKES

Webster Burners  
And-Car Systems

### SERVICE

Troubleshooting - Repairs - Cleaning - Refractory Work  
Efficiency Tune-Ups - Service Contracts - Inspections  
Mobile Boiler Room Rentals - Descaling - Conversions

### SALES

Boiler Room Equipment & Accessories - Chemical  
Systems Burners - Chemical Treatment & Analysis  
Propane Systems And-Car Boiler Blowdown Systems  
And-Car Monitor Systems

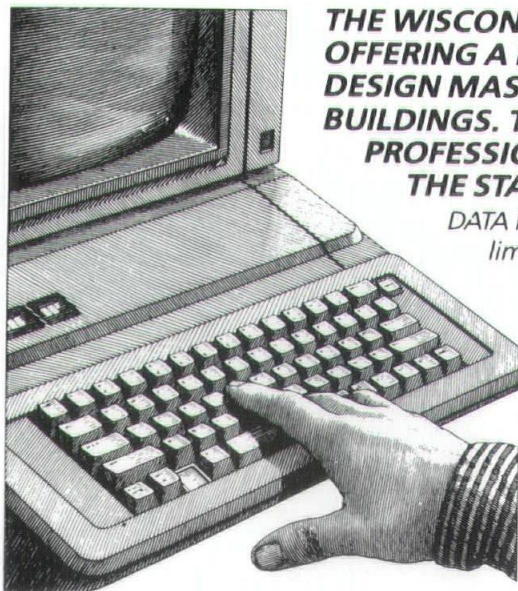
#### THROUGHOUT WISCONSIN AND UPPER MICHIGAN

Milwaukee (414) 781-9620 • Madison (608) 249-6604  
Green Bay (414) 494-3675 • Stevens Point (715) 344-7310  
FAX (414) 781-8526

#### THROUGHOUT MINNESOTA AND NW WISCONSIN

THE HEINEN CO.  
MINNEAPOLIS (612) 936-9800  
DIVISION OF PBBS EQUIPMENT CORP.

## IMPORTANT NOTICE FREE COMPUTER DESIGN SERVICE FOR MASONRY WALLS



**THE WISCONSIN CONCRETE & PRODUCTS ASSOCIATION IS OFFERING A NEW SERVICE WHICH WILL ANALYZE OR DESIGN MASONRY WALLS FOR LOW, MID OR HIGH RISE BUILDINGS. THIS SERVICE IS OFFERED FREE TO DESIGN PROFESSIONALS—ARCHITECTS AND ENGINEERS—IN THE STATE OF WISCONSIN.**

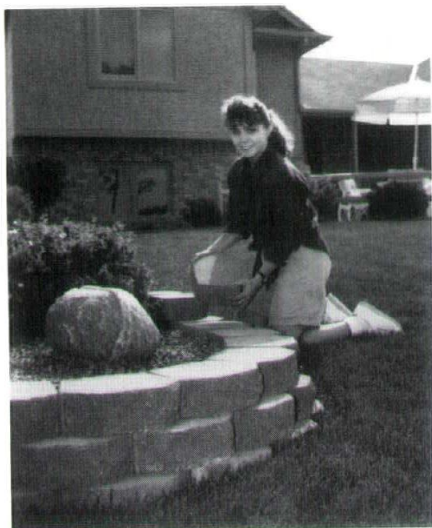
**DATA PROVIDED:** The program will check resisting moments limited by steel stress, masonry stress and deflection of the wall. It also checks shearing resistance limited by shear stress and bond strength and checks flexural compressive stresses, both allowable and actual. Once the stresses have been determined, the programs will check various masonry configurations to arrive at the configuration which would be the most economical construction.

CALL OR WRITE TODAY FOR COMPLETE INFORMATION

414 773-2888  
1-800-722-4248  
RICHARD H. WALTER, P.E.  
EXECUTIVE DIRECTOR, WCMA

**WCMA**  
Wisconsin  
Concrete  
Masonry Association

P.O. Box 339 • Valders, WI 54245 • 414-773-2888 • 1-800-722-4248 • FAX: 414-773-2823



Great Scapes, a division of **Best Block Company**, is now Milwaukee's source for the innovative **Keystone Garden Wall™**, an easy way to build beautiful, economical landscape walls. Keystone Garden Wall units are lightweight and are ideal for quick and simple home projects.

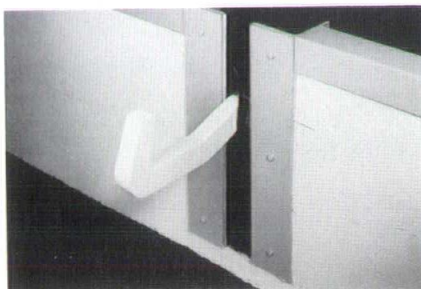
No special tools are required to install the interlocking Garden Wall units, which weigh only 27 lbs. each. The Keystone Garden Wall is perfect for constructing retaining walls, terrace walls, flower bed and garden borders, patio and lawn edging, and tree rings. Both straight and curved contours can easily be achieved.

For further information and many other landscape products, call 414-781-4880, or toll free 1-800-782-7708; W140 N5870 Lilly Road, Menomonee Falls, WI 53051.

An advanced truck restraining system, designed to economically meet safety requirements in new or retrofit loading docks, is available from **Poweramp, Inc.**, a national manufacturer of dock levelers and loading dock systems.

Firmly anchored into a company's loading dock pit, the **PowerHook™ II KS7** truck restraint is designed to seek, find, and lock onto a truck's ICC bar during loading and unloading. This safety device not only eliminates "trailer creep", it also prevents dock leveler operation until the hook is engaged.

For additional information on the

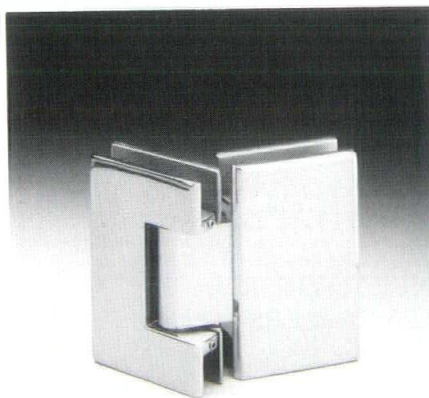


**PowerHook II KS7** truck restraint, contact: Poweramp, W194 N11481 McCormick Drive, Germantown, WI 53022. Phone: 414-255-1510. FAX: 414-255-4199.

**Hiawatha, Inc.** introduces their new Shower Door Hinge for frameless shower enclosures.

The Model HSH 31T and HSH 32T feature solid brass construction with polished brass or polished chrome finishes. Our hinges feature a positive centering action. Neoprene hinge gaskets hold door in position with a vice-like grip. These hinges are designed for 180° glass to glass showers. Additionally, Hiawatha features models for 90° glass to glass, 135° glass to glass and 90° glass to wall situations. Other applications include office frameless glass door and wall assemblies.

For more information, write to Hiawatha Inc., 4450 W. 78th Street Circle, Bloomington, MN 55435. Or call at (612) 835-4944 or fax at (612) 835-2218.



**Spiros industries** has released a new four-page, four-color brochure that shows how suspended tables can help convert a dining room into a multi-purpose area quickly and easily. The literature describes and illustrates the many benefits of these unique 60-inch diameter suspended tables which accommodate up to eight persons comfortably.

Spiros suspended tables are lowered from their retract position in seconds to set up for dining. Afterwards, tables are returned

to storage position under ceiling and the extra space resulting from a tableless area can be converted into a recreation or therapy center, visitors lounge or chapel.

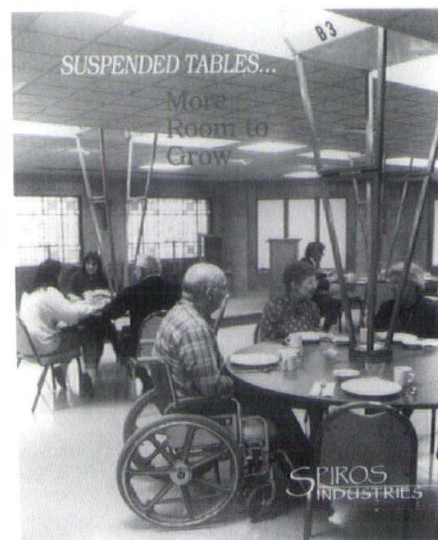
Specifically designed for long-term care facilities, Spiros suspended table systems are ideal for new construction, expansion of an existing structure, or retrofit. For a copy of the new brochure, call or write Spiros Industries, P.O. Box 917, 7666 Highway WW, West Bend, WI 53095. Phone and fax (414) 629-5285.



Railock Mounting Brackets have been designed for mounting wood handrails; especially for mounting 2" x 6" "safety" handrail and similar wood handrails. The warm natural beauty of large wood handrails is appealing and desirable in homes, hospitals, nursing homes, professional buildings, institutions, and the list goes on.

**Railock** Mounting Brackets are easy to install. The ease of installation saves times and money. The mounting bracket works the same, whether the railing run is for a hallway or down a flight of stairs. The brackets meet code requirements for strength and proper spacing of railings from walls. The brackets also offer stability and removability. With just a turn of a wrench, you can remove the railing. This feature will come in handy for painting, wallpapering or maybe that extra inch or two to get the washer and dryer down the stairs.

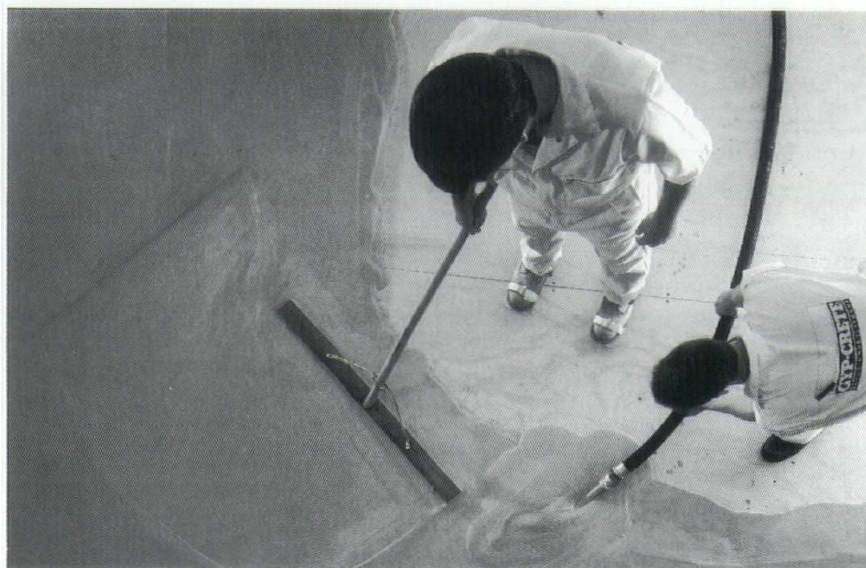
For more information, contact Railock Inc., 431 Lark Ave., Maplewood, MN 55117; (612) 772-6854.



- 24 ASLA Wisconsin Chapter
- 53 Accoustical Floors of Wisconsin, Inc.
- 54 Arnold & O'Sheridan, Inc.
- 20 Artemide, Inc.
- 38 Arwin Builders Specialties, Inc.
- 12 BP Chemicals
- 56 Best Block
- 34 Builders World
- 44 The Cheney Co.
- 54 Dolan & Dustin
- 30 Energy Expo '92
- 6 Four Seasons Design Group
- 54 Bert Fredericksen, Inc.
- 40 Donna Girard Studio
- 30 Harper and Shuman
- 53 Hotel Wisconsin
- 12 Klipstein Insurance Services
- 54 La Force Hardware & Manufacturing Co.
- 54 Lang Associates, Inc.
- 16, 23 LFI-Landscape Forms, Inc.
- 20 Nancy Lynn Interiors
- insert Madison Area Sheet Metal Labor Management Council
- 16 Master Blue Print, Inc.
- 54 Midwest Visual Equipment Co.
- 54 Milwaukee Blueprint Service
- 12 Nielsen Building Systems
- 28 Omni Glass & Paint
- 51 PBBS Equipment Corp.
- insert J.W. Peters & Sons, Inc.
- 54 Photocopy, Inc.
- 51 Purcell Imaging, Ltd.
- 44 SPI Lighting
- 4 S & S Sales
- 44 Sheet Metal Contractors of Milwaukee
- 54 Soils & Engineering Services, Inc.
- 55 Spancrete Industries
- 54 Strass-Maguire & Associates, Inc.
- 53 Superior Gypsum Floors
- 38 Tews
- 24 Ver Halen, Inc.
- 2 Visa Lighting
- 54 Wind Mill
- 3 Wisconsin Bell
- 16 Wisconsin Blue Flame Council
- 30 Wisconsin Brick & Block Corp.
- 51, insert Wisconsin Concrete Masonry Assn.
- 40 Wisconsin EPS
- 8 Wisconsin Electric Power Co.
- 11 Wisconsin Public Service
- 23 Wisconsin Ready Mixed Concrete Association
- 54 Wisconsin Testing Laboratories

*This index is published at no cost to advertisers, as a service to readers of Wisconsin Architect. Publisher assumes no responsibility for errors or omissions. When writing to advertisers, tell them you saw their message in Wisconsin Architect. They want to know.*

# The Overwhelming Choice in Floor Underlayments.



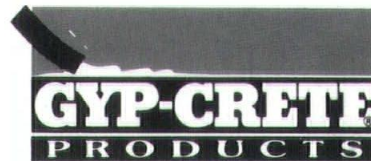
We've poured our underlayments in apartments, condominiums, office complexes, single-family homes and shopping malls. More than 1 billion square feet of Gyp-Crete®, Gyp-Crete 2000™ and Dura-Cap™ have been installed nationwide. For new construction or renovation, they're the overwhelming choice in poured floor underlayments. Installed at a fraction of the cost of other cementitious underlayments.

**Here's why:**

- Sound and fire control
- Accepts virtually all finished floor goods
- Pour over wood or concrete subfloors
- No shrinkage cracks
- Poured from featheredge to 3"
- Accepts foot traffic within 90 minutes
- Fast, efficient installation
- Leveling capabilities

**Accoustical Floors of Wisconsin, Inc.**  
675 Industrial Ct., Suite C  
Hartland, WI 53029  
(414) 367-3306

**Superior Gypsum Floors**  
1132 Ashwaubener St.  
Green Bay, WI 54304  
(414) 336-7225



## TAKING THE WISCONSIN ARCHITECTURAL EXAM AT MECCA IN MILWAUKEE?

Stay at the Hotel Wisconsin! We're offering ...  
**SPECIAL ARCHITECTURAL EXAM DISCOUNTS!!**  
**\$36.00** per room per night (1-4 person occupancy)

Includes the following amenities:



- Free Parking
  - One \$5 breakfast coupon per room per day
  - Cable TV
  - Newly remodeled guest rooms
- Take the skywalk located across the street to MECCA

**Hotel Wisconsin**  
**720 N. Old World 3rd St. • Milwaukee, WI 53203**  
**(414) 271-4900**



ARNOLD AND O'SHERIDAN, INC.  
CONSULTING ENGINEERS

Structural Electrical  
Mechanical Civil

608-271-9651  
815 FORWARD DRIVE MADISON, WI 53711  
414-783-6130  
4125 N. 124TH BROOKFIELD, WI 53005



DOLAN & DUSTIN, INC.  
CONSULTING ELECTRICAL ENGINEERS

1011 N. MAYFAIR RD WAUWATOSA, WI 53226-3448  
(414) 774-4543 FAX (414) 774-4579

Electrical Power - Primary & Secondary Distribution  
Lighting Design • Security & Communications Systems  
Grounding • Emergency Generation • Uninterruptible Power

BERT FREDERICKSEN, INC.

CONSULTING ENGINEERS

3245 North 124th Street Brookfield, Wisconsin 53005-3112  
TELEPHONE 781-9070 (414)

HEATING • VENTILATING • AIR CONDITIONING

Bert Fredericksen-Chairman John Fredericksen-President Bert T. Fredericksen-V. President

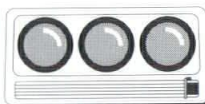
LANG

Wausau, WI (715) 845-1333  
Green Bay, WI (414) 435-2488

Associates, Inc. • Consulting Engineers • Electrical and Automation Specialists  
• Lighting Design • Instrumentation and Controls  
• High, Med, Low Voltage Design • Automation  
• Systems Design • Testing

## Meeting Room AV Systems Design

Need more help when you design meeting rooms using AV, video computers or teleconferencing systems? Call Flint Bridge at Midwest Visual. 414/ 784-5880.



## SOILS & ENGINEERING SERVICES, INC.



Geotechnical, Material Testing, and  
Environmental Consulting Engineers

1102 STEWART STREET 608-274-7600  
MADISON, WI 53713-4648 FAX 608-274-7511

\*Black & White Murals \*8x10 Glossy Repros  
\*We Reproduce Blueprints or Masters For  
Making Blueprints

PHOTOCOPY

104 East Mason St. Milwaukee, Wisconsin 53202

For Service . . .

CALL: 1-(414)-272-1255



MILWAUKEE BLUEPRINT SERVICE

7526 W. Appleton Ave., Milwaukee, WI 53216

Fast Diazo Printing • Specs • Supplies

Free Pick-Up and Delivery with Minimum Order

(414) 464-2350

1-800-686-2350

## Strass-Maguire & Associates, Inc

CONSULTING \* STRUCTURAL \* INDUSTRIAL \* ENGINEERS

9000 N. DEERBROOK TRAIL, SUITE #110

MILWAUKEE, WI 53223

#414/354-4046 FAX 414/354-5008



## SLATWALL SYSTEMS

by Wind Mill



■ Full line manufacturers.  
■ Slatwall panels and fixtures.

1-800-548-7528

SLATWALL SYSTEMS BY  
Wind Mill

200 Balsam Road, Sheboygan Falls, WI FAX (414) 467-6114



Wisconsin

TESTING LABORATORIES

Geotechnical Engineers

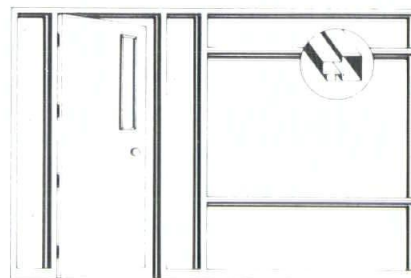
Soil Borings

Materials Testing & Inspection

Menomonee Falls, WI 53051 • (414) 252-3300

LA FORCE

CUSTOM FRAMES . . .  
MADE TO YOUR DESIGNS



Expertly engineered hollow metal frames, made to your specifications. Select any door height, profile, face dimension or jamb depth you want. Count on us to provide what you need.

- Hollow Metal Doors & Frames
- Wood Doors
- Builders Hardware
- Toilet Partitions
- Toilet Accessories
- Building Specialties

LA FORCE

Hardware & Manufacturing Co.

1060 W. Mason St. 12040 W. Feerick St.  
Green Bay, WI 54303 Milwaukee, WI 53222  
(414) 497-7100 (414) 466-5350

THE REPUTATION YOU CAN BUILD ON

# Design Versatility. From Any Angle.

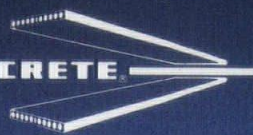
"Because of this building's non-rectangular design, we required a material that could accommodate a series of angular shapes. Precast Spancrete was chosen for the floor planking and balconies because it could be cut off site to these precise shapes.

"Building high in the air on the lakeshore in winter presented some unusual weather problems, too. Spancrete provided a flexible construction method that was not weather dependent.

"In short, Spancrete was an economical solution that gave us a clean, finished look and was erected rapidly. And it easily conformed to the unusual shapes called for by the building's design."

Robert Wirth AIA Architect, Torke Wirth Pujara Ltd. Architects Engineers

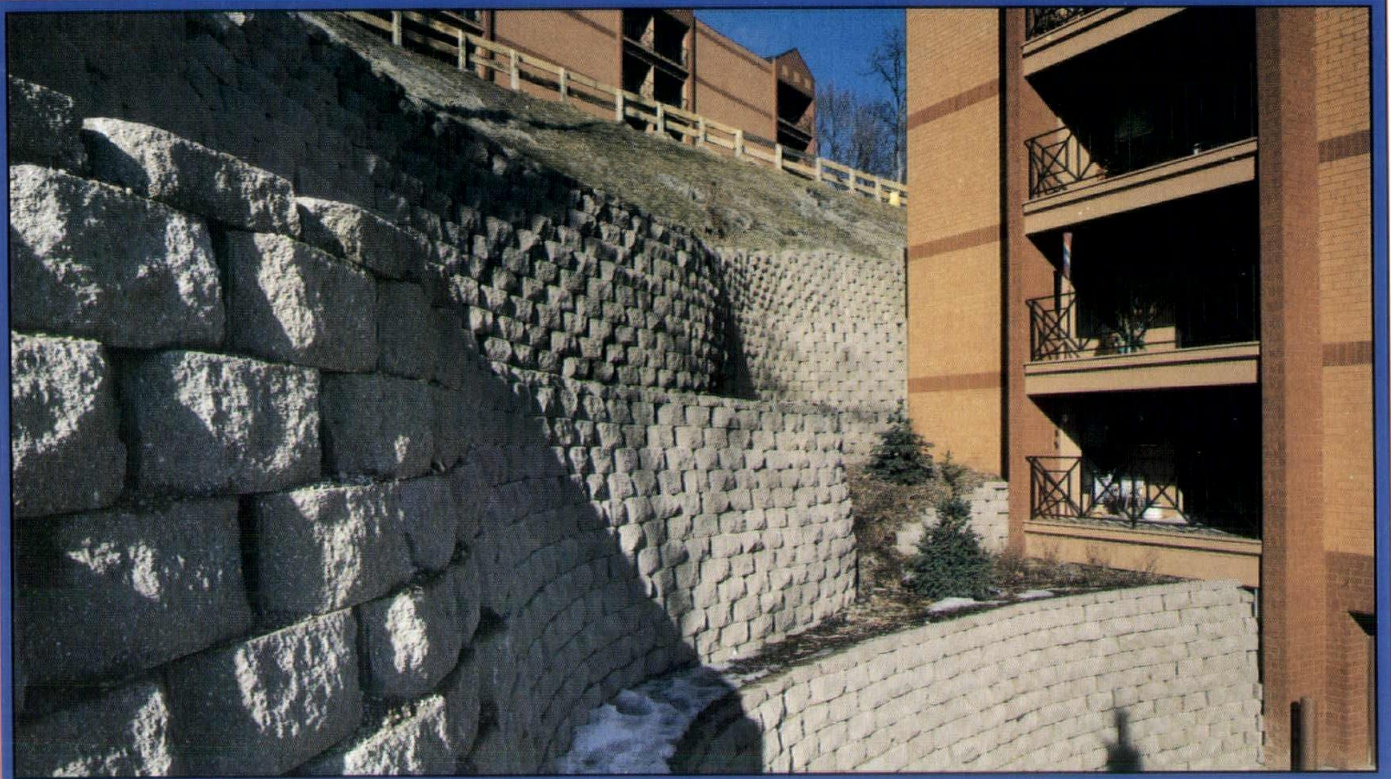
**SPANCRETE**



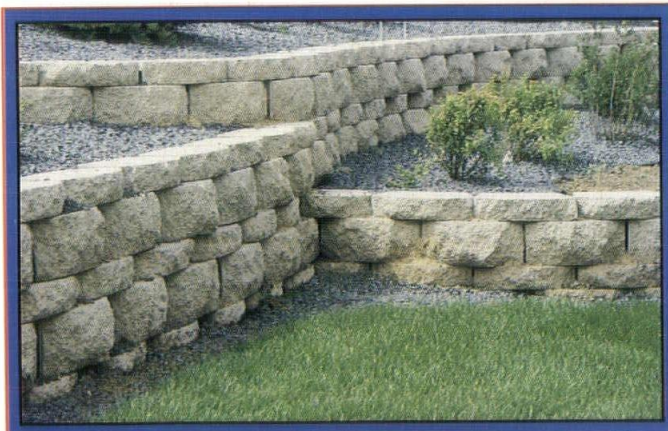
Spancrete Industries, Inc.  
10919 West Bluemound Road  
Milwaukee, WI 53226 • 414 258-4110

Lakeshore Towers Luxury Condominiums  
Racine, Wisconsin





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



**KEYSTONE**  
• RETAINING WALL SYSTEMS •



**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.

Manufactured in this area by

**BEST  
BLOCK**  **COMPANY**