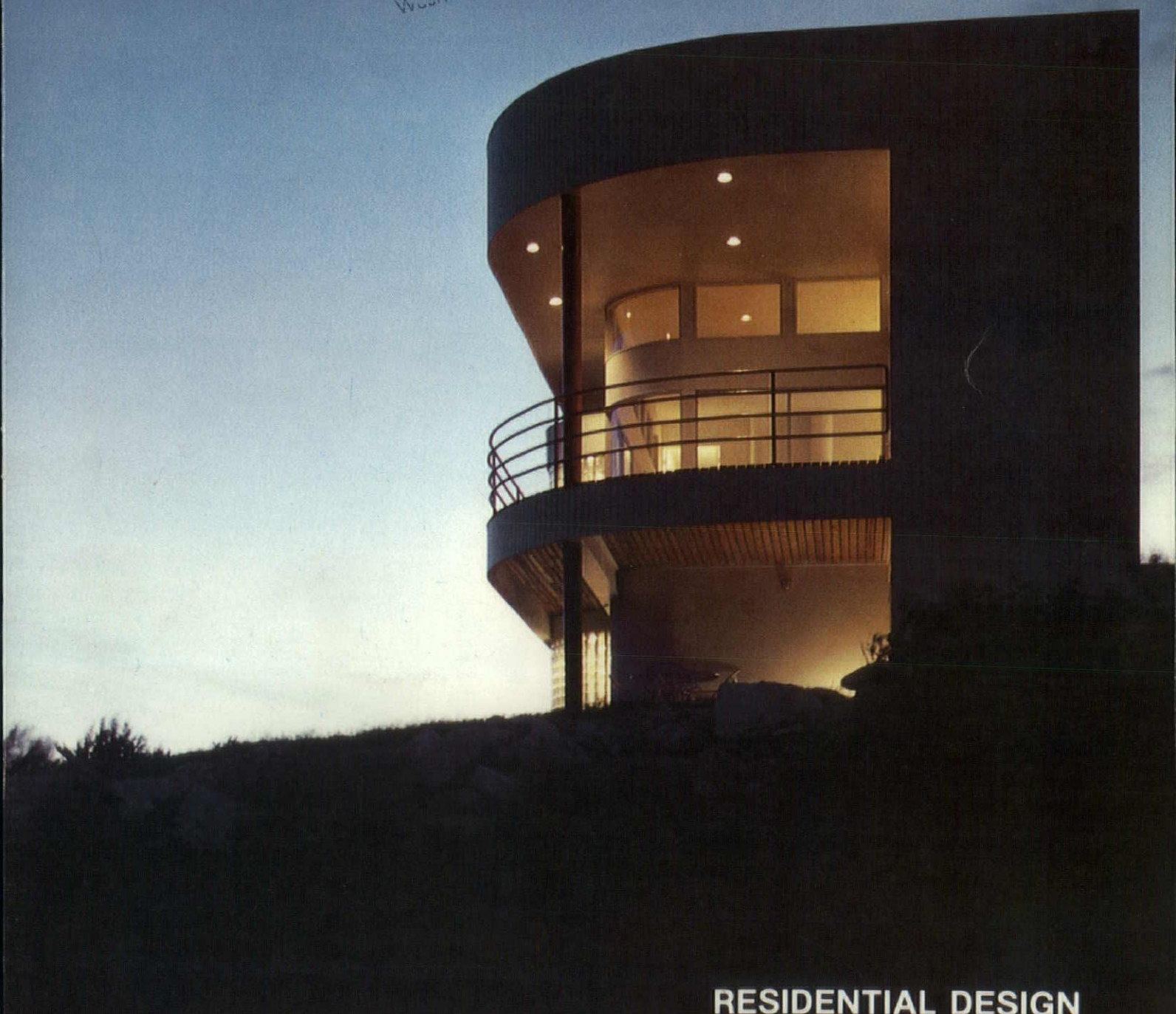
IA - 1981 - JAN./FEB.

IOWA ARCHITECT

January/February, 1981



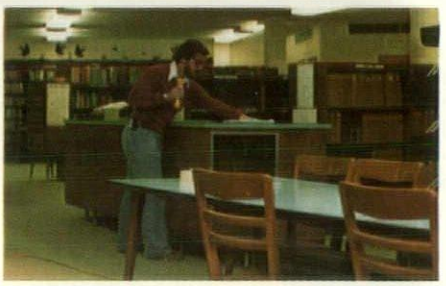
RESIDENTIAL DESIGN

Upgrading Your Facility?

Whatever Your Needs, We Have The Package For Them

Designing and Renovation can add or upgrade existing space with new finishes from floor to ceiling

We leave the Job "spick and span."



Asbestos Control in Schools & Offices. The above project involved sealing the existing Asbestos fiber ceilings.

New Construction	Kitchen Planning	Carpeting & Flooring
Additions	Food Service Equipment	Wall Coverings & Draperies
Remodeling	Specialty Goods	Office Equipment
Planning Design	Complete Painting	Case Goods

- SPACE PLANNING AND DESIGN CONTRACTS
- FULL SERVICE FROM STRUCTURE TO APPOINTMENTS
- DESIGN-PURCHASING-INSTALLATION IN ONE SOURCE
- SCHEDULING FLEXIBILITY-WE CAN REMODEL YOUR AREA BY NIGHT...WHILE YOU USE IT DURING THE DAY
- TURNKEY CONSTRUCTION SERVICES FROM PLANNING TO FINISH
- BUDGET AND STRUCTURAL MAINTENANCE PROGRAM ASSISTANCE

"Innovative Building Specialists"

Willis Decorating and Remodeling, Inc.

2220 N.W. 108TH STREET • DES MOINES, IOWA 50322 • PHONE: 515/270-2525

For more information, circle no. 01 on your Datacard.

All single ply roofs are not created equal.

Aerial view of the Carlisle roof on the new Milton, Pennsylvania Distribution Center

The roof that's got the future covered.

You probably already know about the many benefits of single ply roofs over traditional built-up roofs. Benefits that are making "single ply" the new industry standard. But you should also know that all single ply roofs are not the same. Carlisle offers you all these major exclusives:

Carlisle produces and applies Sure-Seal® elastomeric membrane—the single ply sheet we pioneered more than 23 years ago.

Carlisle has single ply roof applications successfully in place for over 20 years now. Roofs that stubbornly refuse to crack or leak after two decades of punishment by the sun, rain, wind, hail and snow.

Carlisle produces factory-fabricated single ply sheets in super huge dimensions. In fact, we offer single sheets as big as 45 feet by 150 feet, which minimizes field seaming.

Carlisle provides one-source reliability. Everything you need—membrane, sealant, flashing and accessories—comes from one reliable American source.

Carlisle operates an ongoing and mandatory two-day training school for single ply applicators, to assure top quality workmanship in every Sure-Seal roof.

Carlisle single ply roofs receive a five-year "watertight warranty" that can be extended for an additional five years!

Carlisle single ply roofs are backed by nationally respected Carlisle Tire & Rubber Company—leader in the research, engineering and manufacture of waterproofing materials for almost three decades.

These are some of the features that have made the Carlisle Sure-Seal roof *the single best, single ply system.* You owe it to yourself to find out more. Call or write today!

For more information, circle no. 02 on your Datacard.

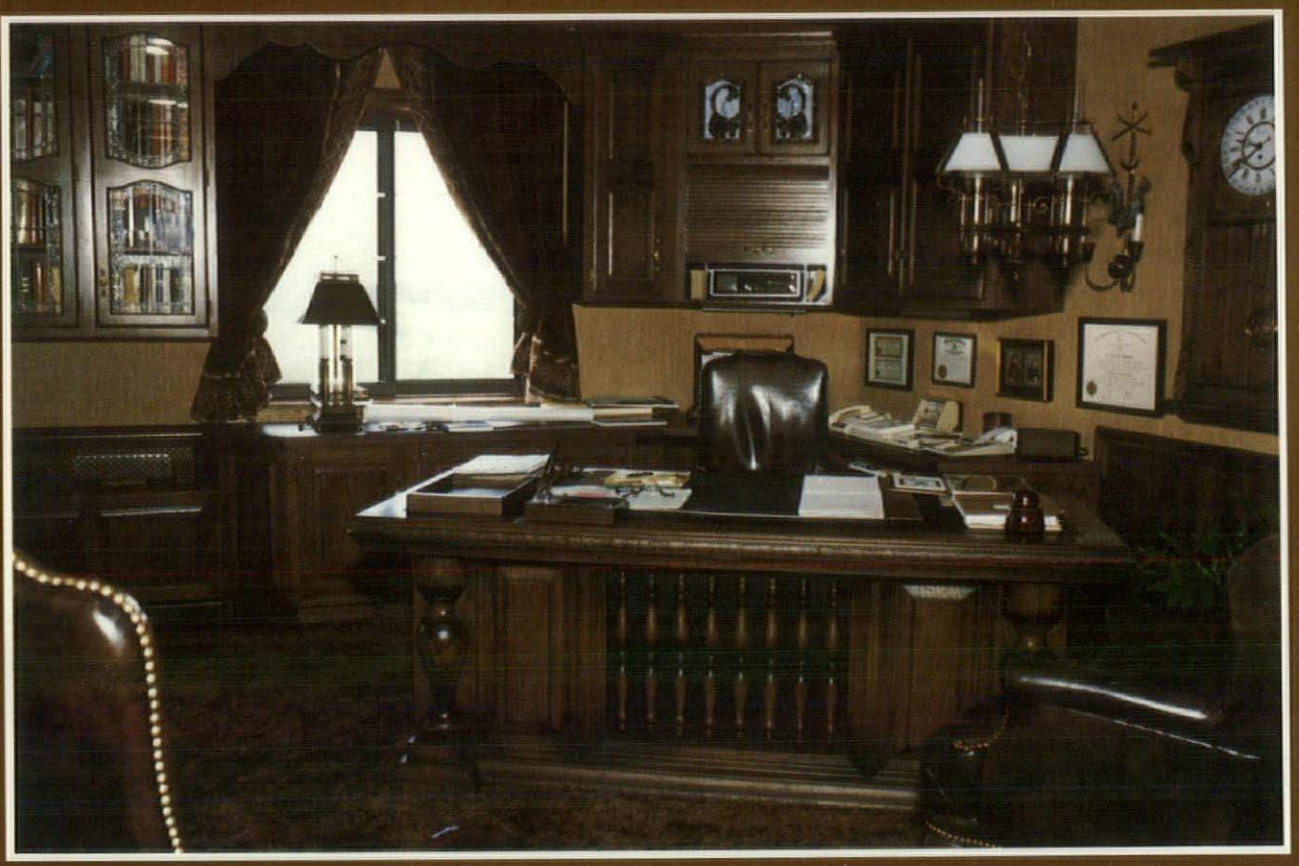
"Over 250 applications in Iowa"

SBP **STETSON BUILDING PRODUCTS**

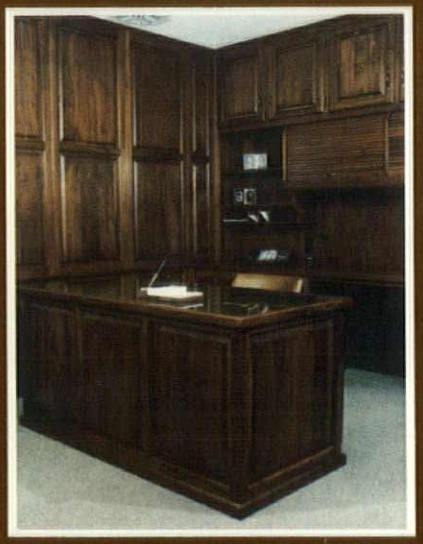
Rock Island, Illinois
619 11th Street • Phone 309/788-8412

Des Moines, Iowa
610 S. W. 9th • Phone 515/243-6286

S & E *Cabinet Originals*



Commercial office interior for Allan Poots & Associates
Windmill Point at Lakewood Hills, Coralville, Iowa.



Example of custom designed solid walnut decor incorporating wall panel system (note matching desk design).

Unique Environments
Designed Especially For You

S & E Custom Cabinets

107 2ND AVENUE P.O. BOX 5581
CORRALVILLE, IOWA 52441 • PH. 319/351-1487

For more information, circle no. 03 on your Datacard.

SPECIALISTS IN CUSTOM CASE WORK: RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL WOOD PRODUCTS

ia

IOWA ARCHITECT

USPS 463-010

Volume 28 Number 1
January/February
1981

The IOWA ARCHITECT is the official publication of the Iowa Chapter, American Institute of Architects. It is published bi monthly for the Iowa Chapter by Midwest Advertising Service, Inc., 3501 Skyline Drive, Des Moines, Ia. 50310. Controlled circulation paid at Des Moines, Ia. Single copy price $2.00.

Send all address changes (Form 3579) to: Ia. Chap. A.I.A., 512 Walnut Street, Des Moines, Ia. 50309

Editor:
Kirk V. Blunck, AIA Assoc.

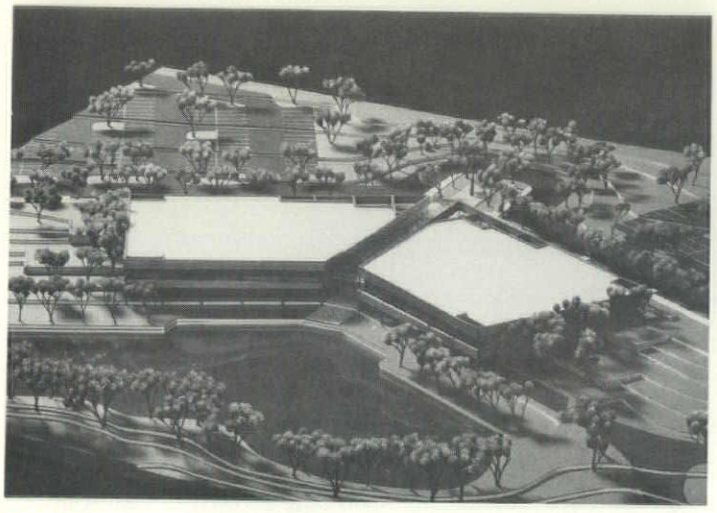
Managing Editor:
Mick Enabnit

Publisher:
Midwest Advertising Service
Des Moines

Editorial Staff:
Edward Soenke, AIA
H. Ronald Walker, AIA
Mark Schmidt, AIA
Bryan Shiffler, AIA
Gary Moriarity, AIA

On The Cover:
Clause Residence
Lago Vista, Texas
1980 AIA Design Award
Architect: Tom Clause
(**ia**, November/December 1980)

WORKS IN PROGRESS



National Servicing Center Waterloo, Iowa

Designed by The Durrant Group Inc., Dubuque, Iowa and currently under construction is a new National Servicing Center for Banco Mortgage Company. The two-story 75,000 square foot facility is located on a 15 acre site on Hammond Avenue off Highway 412 in Waterloo, Iowa. Responding to a site that slopes to the south, the steel-framed structure was set one and a third story into the ground at the north facade. A two-level entry and cafeteria atrium on the south focuses on a newly created lake that collects water run-off from the site and serves the cooling system.

The size of the facility can be doubled by extending the office wings to the east and west.

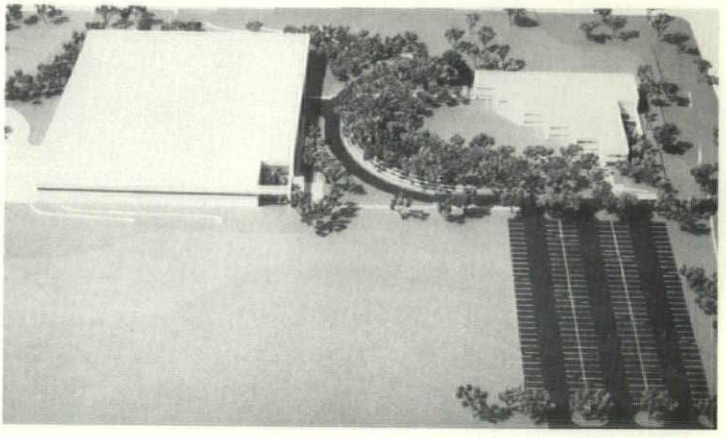
Other energy-conscious features of the design include northerly berms and planting screens, deep southerly window shading, horizontal bands of triple glazing, and heavily insulated roof and perimeter walls. The exterior is clad with grey-beige colored aluminum composite panels.

Completion of the $4.5 million project is expected in April, 1981.

Des Moines Skywalk System Moves Forward

The first of a system of city constructed second level skywalks will soon form a link between the Des Moines Marriott Hotel and the Locust Street Mall parking and retail structure now under development. Designed as part of an initial six bridge project by Brooks, Borg and Skiles Architects, it is the only segment to have so far hurdled the difficult legal barriers to establishing a public funded and operated system. While the design parameters and location of skywalk bridges had been broadly determined in a study and proposal completed with Barton-Aschman Associates Planners, final bridge placement and accomodation of significant level changes between downtown buildings has proven challenging. Through fundamental concepts of structural support, visual transparency, connections, level change provision, and exterior proportion had been set by the architects early on, consideration for each bridge was to be given to exterior material selection and compatibility with adjacent buildings. Provision of electrical and mechanical service to the skywalk bridges from connecting buildings in many cases proved impractical due to inconveniently located existing systems and recent changes in public utility laws that prohibit sub-metering of energy consumption. The north-south skywalk from the Locust Mall will form a visual continuation of the dark bronze aluminum panel enclosure already in place along the east length of the Marriott. Four foot deep girders within the upper portion of the bridge form the span from which the floor structure is suspended by the steel rods. The $205,000 link is expected to be completed by early spring, 1981.

Headquarters & Distribution Center, Kansas City, Missouri

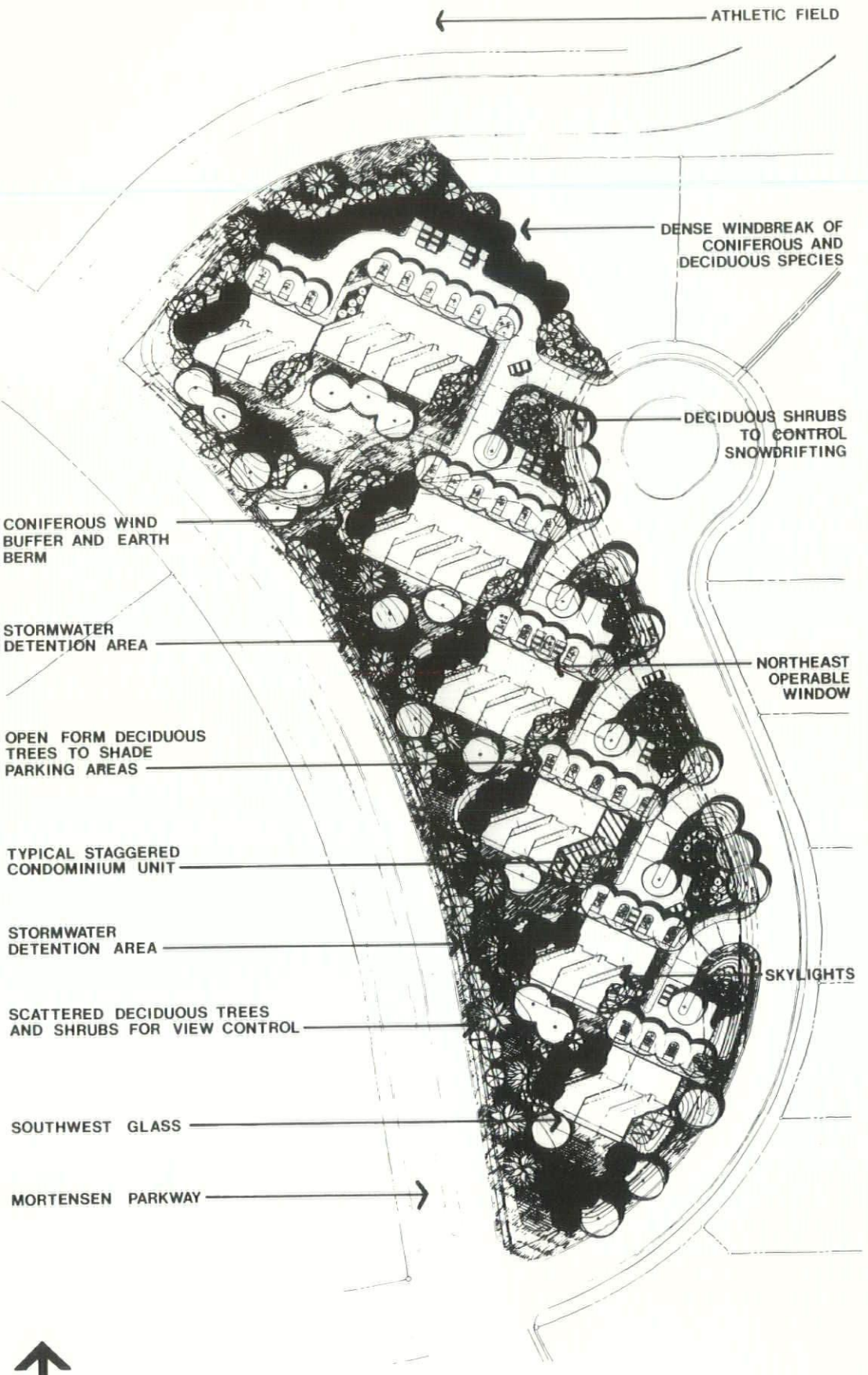


Construction has begun in Kansas City, Missouri for a National Headquarters & Distribution Center for DeLaval Agricultural Division of Alfa-Laval, the world's largest manufacturer of dairy equipment.

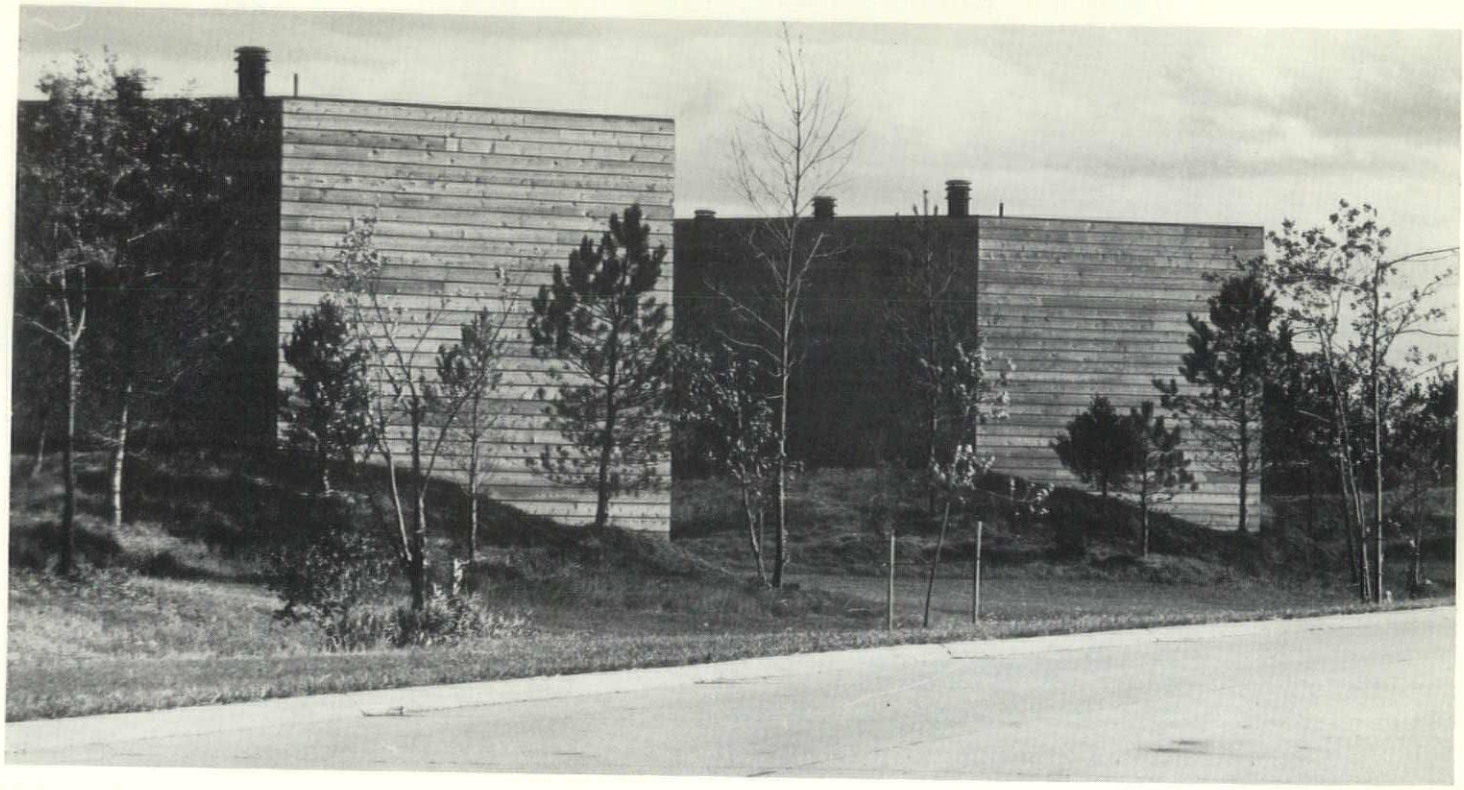
Designed by The Durrant Group Inc. of Dubuque, Iowa, the project responds to the client's request to create a quality environment for the staff and a fresh image to the public. The forms and scale of the 42,000 square foot, two-level office building and the 110,000 square foot distribution center reflect the separate functions, yet both buildings are enclosed in cream-colored insulated metal panels and reflective glass for a unified design.

The project focused on an interior grassy meadow enclosed by buildings, earth forms, plantings and drive. The design allows future growth through doubling the size of each facility. The meadow will be preserved since that expansion will be toward the site perimeter.

Completion of the $6 million project is expected for September, 1981.



BLUESTEM MEADOWS



The Bluestem Meadows:

Saving Energy Through Design Cooperation

by Jeffrey D. Benson, Landscape Designer
The Design Collaborative at Ames

The amount of energy needed to keep a home comfortable depends upon various factors: the personal needs and tastes of the residents, the form and materials of the structure, the form and materials of the landscape surrounding the home, and the climate of the site and region in which it is located. These factors are all interrelated, but the relationships of the structure and the landscape are those factors that can be manipulated in the design process. With energy costs now at a premium, considerable savings can be gained when the architectural and landscape designers work together. This is well demonstrated by the Bluestem Meadows townhouse project in Ames.

The Bluestem Meadows is being developed by James R. Mazzitelli in the Gateway Hills Planned Unit Development. The Gateway Hills, a project of the Iowa State University Research Foundation, was conceived as a demonstration of current energy conscious housing design and environmentally sound site/structure relationships. Guidelines were written to encourage individual lot developers in the project to make use of techniques to save energy through architectural and landscape design, to exploit renewable energy resources, and to make use of a natural stormwater management system to prevent increases in runoff rates after development. In responding to these guidelines and in devising a program for the Bluestem Meadows, the developer decided to build 27 condominium units on his 3.7 acre parcel incorporating the principles of passive solar energy and energy conserving architecture. From the start the project designer, Ray D. Greco, and the landscape architects, David L. Dahlquist, ASLA and William J. Grundmann, ASLA of the Design Collaborative at Ames, worked together in order to meet the various provisions of the Guidelines and the developer's program on a rather confined site.

The primary constraints identified during the initial site layout phase were the north-south elongation of the site, the building setbacks imposed by zoning, and the grade difference between the site and street on the east. Access was not allowed from Mortensen Parkway to the west. It was apparent that providing good solar access


The Counter Revolution
A revolutionary new concept in sinks and counter surfaces.
Cerámica Coordinates
A porcelain enamel cast iron sink and ceramic tile ensemble that is ideal for luxury kitchens. Sink and tile edges are mated to create a flush, free-flowing counter surface. Eljer master enamelers painstakingly recreate the random, delicate hues of American Olean's Primitive Encore® Tile in the sink. The result is a dramatic one-piece look you can get only with Cerámica Coordinates from Eljer and American Olean.
CREATE A COUNTER REVOLUTION. Specify Cerámica coordinates. For your copy of "The Counter Revolution," ideas in luxury kitchens, write Eljer, Department PA, 3 Gateway Center, Pittsburgh, PA 15222.
ELJER
WallaceMurray

to more or less standard condominium units was going to be a major problem on this site.

To solve the problem of solar access, a staggered unit arrangement, as illustrated by the site plan, was conceptually designed. Principal fenestration of each dwelling was oriented 27° west of south to take advantage of SW summer breezes, park views, and winter solar gain. Roof top skylight wells rotated 18° east of south allowed early morning sun to warm mass walls positioned behind the skylights and overcome the problem of one unit shading the next. The landscape designers analyzed various possibilities for grading, drive and parking area locations and landscaping associated with the proposed building layout. The staggered arrangement provided the necessary space to bring drives up to the units at a reasonable grade and created opportunities for energy saving berms and coniferous planting to buffer winter winds.

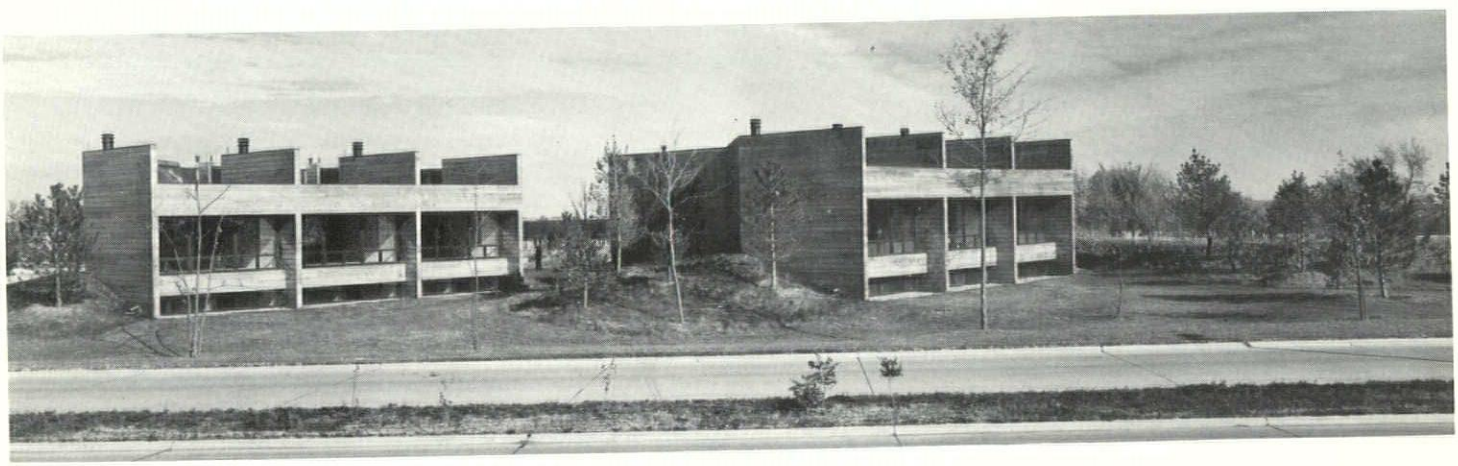
In order to get the most energy saving for the amount of project money available for plantings, it was necessary for the landscape designers to understand not only the climatic forces affecting the site, but also the major energy assets and liabilities of the structure itself. Obviously, winter shading of the southwest and rooftop glazing had to be avoided. Summer shading of this glass had been provided through architectural shading devices. The alignment of Mortensen Parkway, curving in from the northwest, directs cold winter winds toward the site. The northeast bedroom windows were particularly vulnerable to this potential winter heat loss problem. These windows were also exposed to the north winds, flowing across a large, open athletic field to the north. On the other hand, these operable windows are an important part of the summer cooling system. Summer breezes from the southwest can be picked up by operable windows at all levels of the structure and allowed to exit through the northeast-facing bedroom windows. Dense plantings near these windows would inhibit this summer air flow.

These climatic/energy considerations had to be balanced with several other important site needs. One was to keep the parking areas and unit entrances free of snowdrifts. Northeast winds in the winter often occur in Iowa during or after periods of snowfall. With unit entrances facing northeast, snowdrifts could become a bothersome nuisance. View control was also important. Secondly, the southwest orientation of the living room glazing directed views to Mortensen Parkway and, except for the units at the south end of the lot, to another townhouse development across the road.

The landscape plan uses a dense windbreak planting at the north end of the site to break up winter winds from the north. This windbreak consists of both coniferous trees and deciduous shrubs. Coniferous trees and shrubs and berms adjacent to the long northwest racing walls buffer the units from the northwest winter winds channelled down Mortensen Parkway. These trees are kept close to the wall to allow maximum southwest sun and to prevent the shading of a significant portion of the glazing on the units to the north. Although further coniferous plantings to protect the northeast windows from winter winds were deemed inadvisable because of the need for an exit for summer breezes, the snowdrifting problem was considered. A steep slope facing northeast with low deciduous shrubs near the top, will capture blowing snow here, away from the unit entrances. Most of the snow should be deposited on these northeast slopes away from the parking areas as well.

Summer shading of the parking areas is accomplished by deciduous trees northeast of the units. The more open form Honeylocusts are used to allow for the escape of summer breezes from the second level windows. Southwest of the structures, large overstory trees and scattered deciduous shrubs located well away from the units will still allow the summer breezes to reach the operable windows. Although not located in one mass, the combination of these plantings as seen from inside the home will screen the unwanted views and increase a feeling of privacy.

By working together, the project designer and landscape architects were able to arrive at an exciting and unique solution to a difficult set of constraints. Through understanding the intent of the architectural concept, the landscape architects were able to enhance this concept and improve upon the energy efficiency of the project as a whole. The success of this cooperation is attested to by the receipt of a HUD Passive Solar Design Award and by the energy savings enjoyed by those now living in the Bluestem Meadows.



No two Action Office® installations are alike. Because no two organizations are alike.

Herman Miller's Action Office system takes its cues from the particular needs of your organization.

To provide carefully tailored work environments that support a wide variety of tasks.

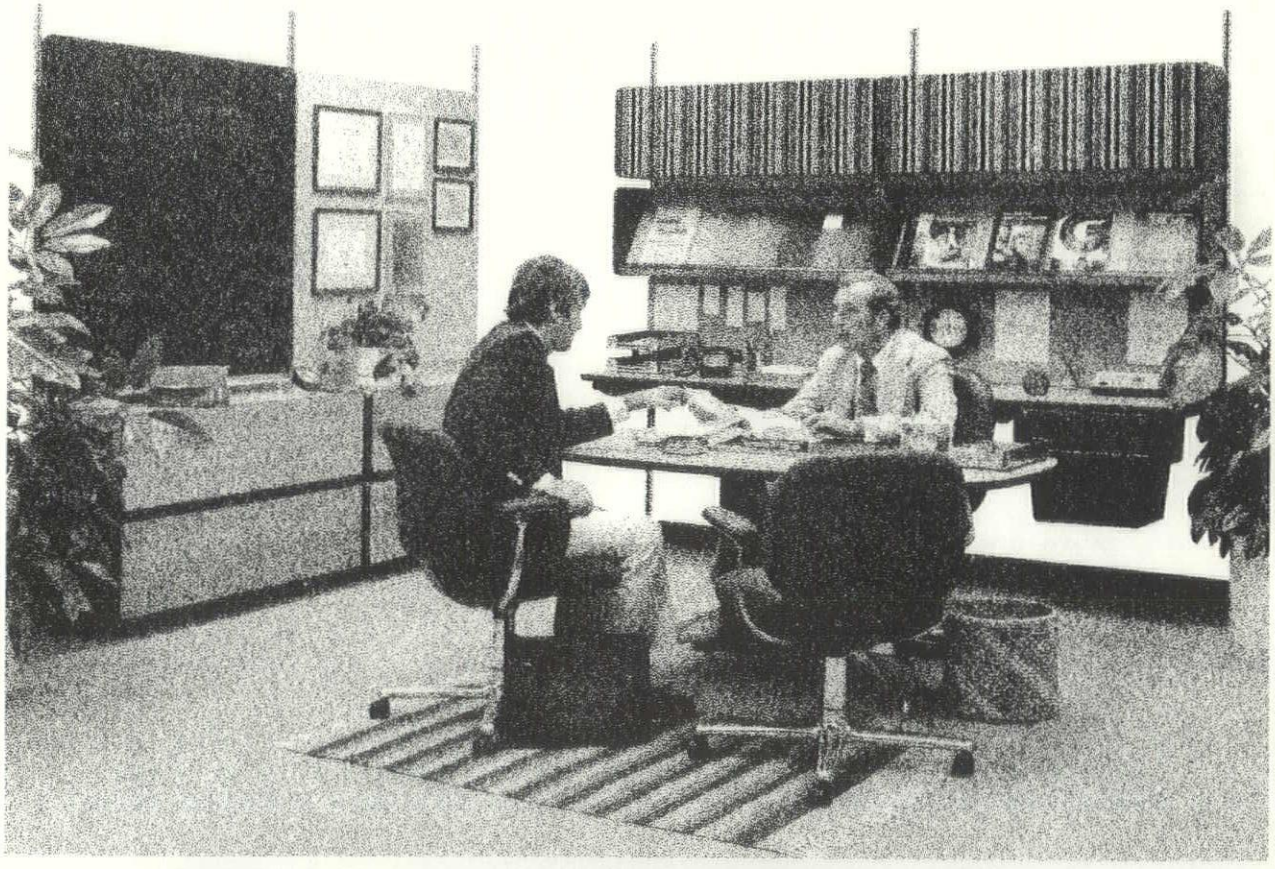
To improve communications between individuals and among entire departments.

To allow a custom appearance that considers both organizational image and employee personalization.

To position vital work surface, filing, reference and display functions into the zone easiest for people to see and reach – while reducing floor space needs by as much as 20%.

What's more, your Action Office environment will adapt easily to changing work activities and communication patterns – at a fraction of the usual cost. With proper planning, you can affect office reconfigurations for *less than $1 per square foot* compared to over $20 per square foot for restructuring fixed wall environments.

The Action Office system by Herman Miller. It's more than a place to work. It's a way to work better. Call us today for complete information.



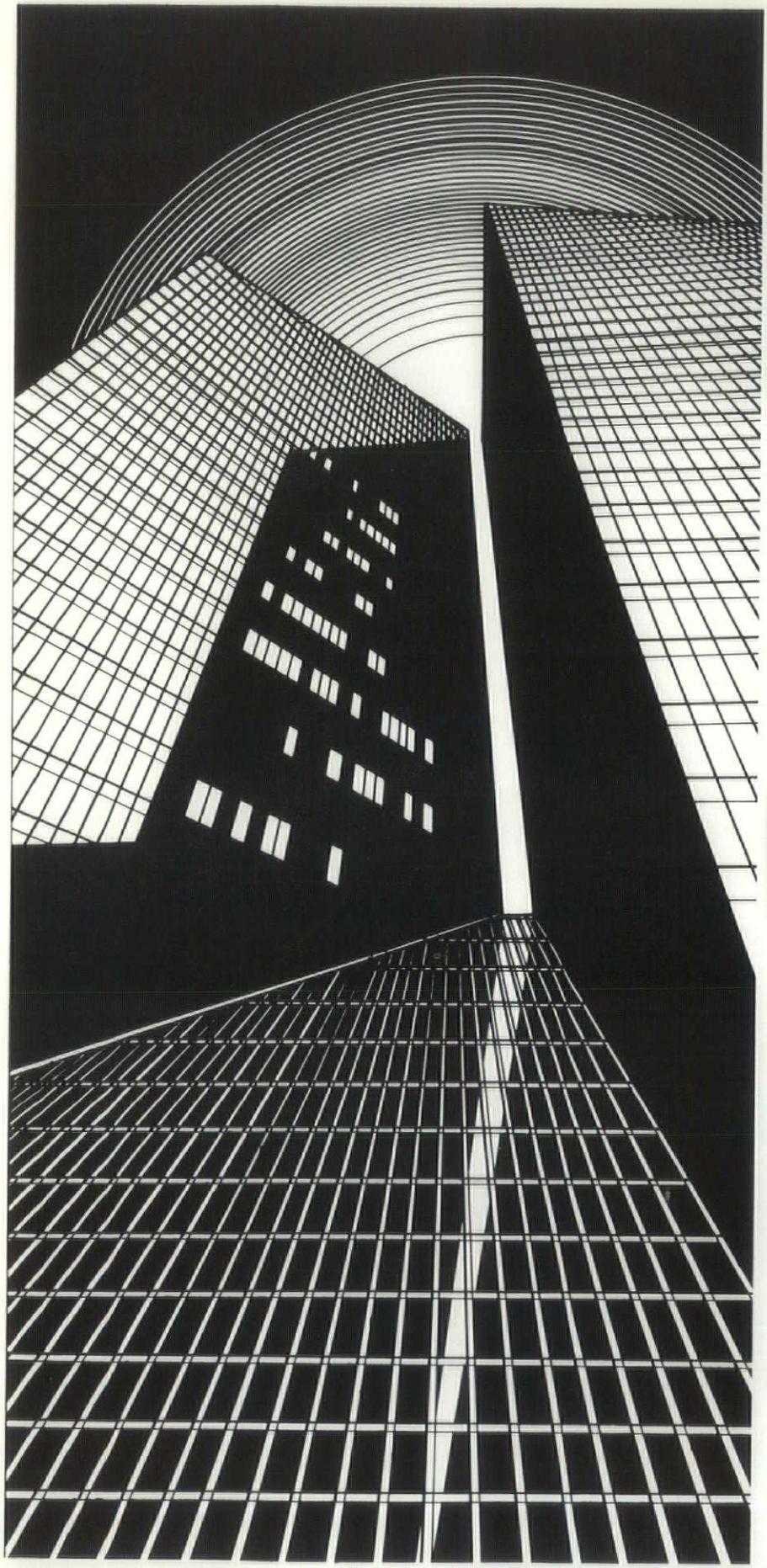
pigott, inc.

3815 ingersoll avenue
des moines, iowa 50312
515/279-8879

iowa's largest furniture systems dealer

planners—consultants—contractors—furnishing systems for the office, health care, laboratory and educational environments

For more information, circle no. 08 on your Datacard.



Aesthetics and Energy...

The future is in your hands.

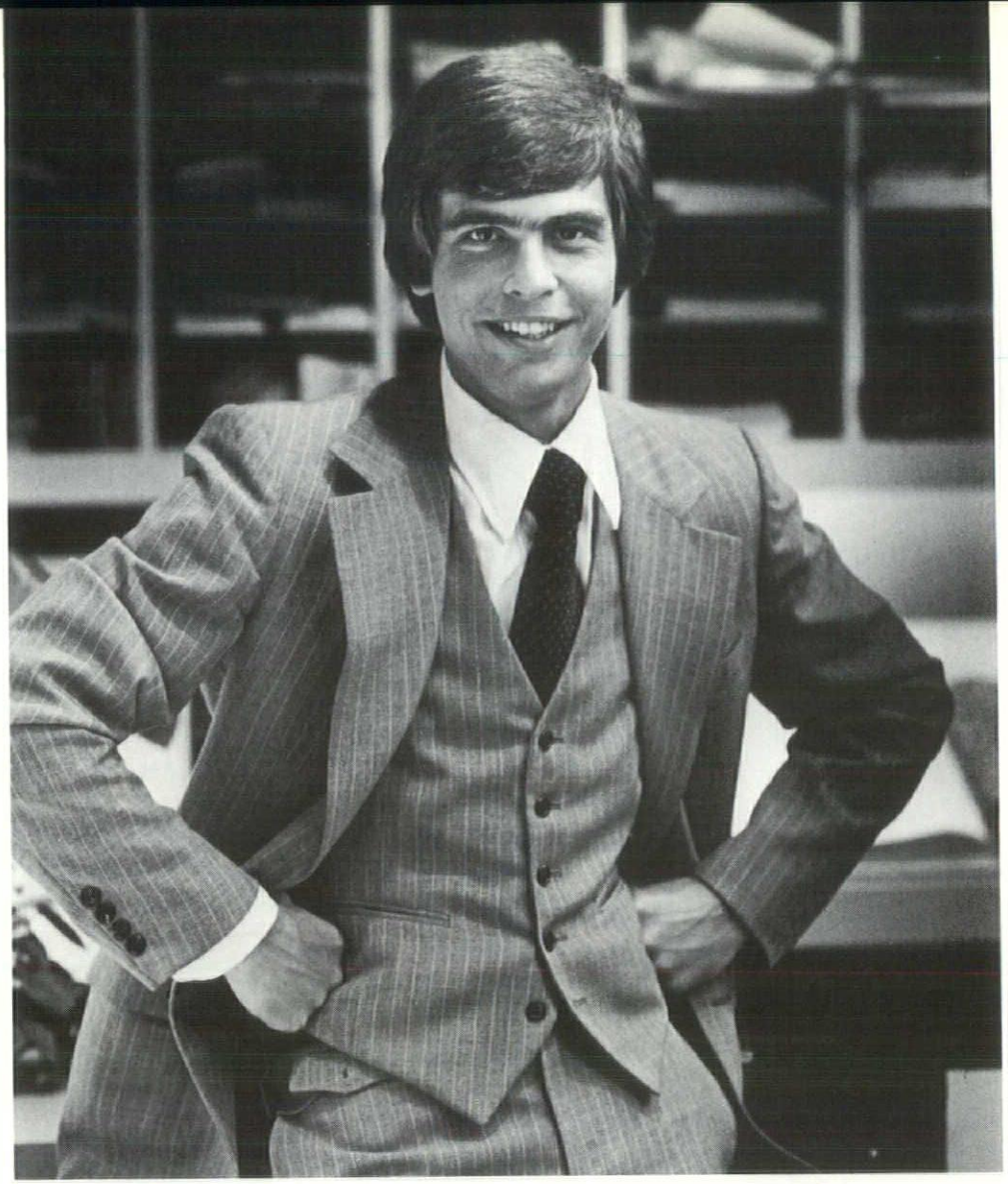
You have a unique opportunity to influence the energy future all of us must share. Incorporating energy efficiency in each structure you design will result in substantial cost savings throughout the life of the building. And you'll be making a permanent contribution to the proper use of limited energy resources.

Pressures are mounting for increased government regulation of energy systems and related structural design. Your responsible leadership in this area can help eliminate the threat of additional regulation. And your efforts will create exciting new opportunities for innovative design.

IOWA POWER

Working For
An Energy Future
We Can All Live With

For more information, circle no. 09 on your Datacard.



"We'll outservice any wallcovering supplier in the 5-state area."

–Jeff Lien, Hirshfield's Contract Sales

Next commercial wallcovering job that comes up, give us a call at Hirshfield's Contract Sales.

(612) 370-2626.

We'll show you what Hirshfield's means when we say, "We'll outservice any wallcovering supplier in the 5-state area."

We're out to win you over by outsupplying, outservicing, and just plain out-hustling the competition.

Our services include:

- **A Free Architect/Designer Reference File** of the latest commercial and specialty wallcoverings, looseleaf bound so it can be continuously updated.
- **Layout Assistance** in the coordinating of wallcoverings with fabric, carpeting, draperies, etc.
- **A Contract Sales Showroom** at Hirshfield's downtown Minneapolis store, 824 Hennepin. Plus 8 other showrooms in the metro area.
- **Complete sampling program** for all commercial wallcovering lines.
- **Measurement of rollage requirements** for jobs.
- **Consulting** on paints and sundries.

Call us for your next commercial wallcovering project.

Hirshfield's . . . the Twin Cities' largest and most complete decorating products supplier . . . since 1894.

HIRSHFIELD'S
CONTRACT SALES

Contract Showroom: 824 Hennepin Ave., Mpls. (612) 370-2626. Designer Showroom: Suite 304, Harmon Court Design Center, 1128 Harmon Place, Mpls. (612) 370-2695.

Distributors of: Stauffer Commercial Vinyls, Spectra Royale Vinyls and Architectural Reference File, Environmental Graphics, Eurotex, Geometrics for Designers, Fred Cole Foils, Hasi Hester of California, S. M. Hexter Wools and Linens, Manuscreens, Executive Wood, Laue Suedes, Mirror-Flex, Naturescapes, Vinyl Weaves and Textures & Stripes by J. Josephson, Edinburgh and Balmoral by Sidlaw of Scotland, Textured Vinyls by Moss, Imperial Wallcoverings, United Wallcoverings, Vescom of Holland, Vin-L-Fab Commercial Vinyls and Let's Talk Textures by Laminating Services, Fuller-O'Brien Paints, Olympic Wood Finishes. Representatives for: Jack Denst Designs, Winfield Designs, Albert Van Luit.

Interior Remodeling
Rod Kruse Residence
Ames, Iowa

Architects' Houses

The Designer As Client

The dwellings architects create for themselves may assert their most bold intentions or stand as carefully orchestrated acts of understatement; yet they continually represent their most imaginative efforts. Indeed, it can pose a singular opportunity to explore, unencumbered, new or personal techniques of building and finishing, to test first-hand concepts of space, form, proportion, line, color and texture. At the smallest scale, an architect's house becomes an intimate laboratory for examining material relationships or connective details.

Inevitably, many of the ideas so tested in an architect's own house find their way into his or her daily practice. Soaring ceilings, skillfully manipulated natural light or bold forms, while not of necessity manifested in each subsequent design, at least will guide his or her selection of design alternatives and understanding of their appropriate uses.

At a different level, architects have a singular chance to formulate the functional criteria of their dwellings and stand as the ultimate, if not objective, critic of the success in satisfying them. A good portion of the design process will likely have been spent defining living patterns or delineating specific project components that will contribute to producing a pleasing, livable environment. Others will have viewed the process as a finite exercise with more or less concrete goals of economy, ease of maintenance, or resaleability. A few, finally, will have jealously used the opportunity to build, to explore the most daring of their theoretical architectural notions, creating exciting, disquieting, complex, intellectually stimulating or confusing environments in which to live.

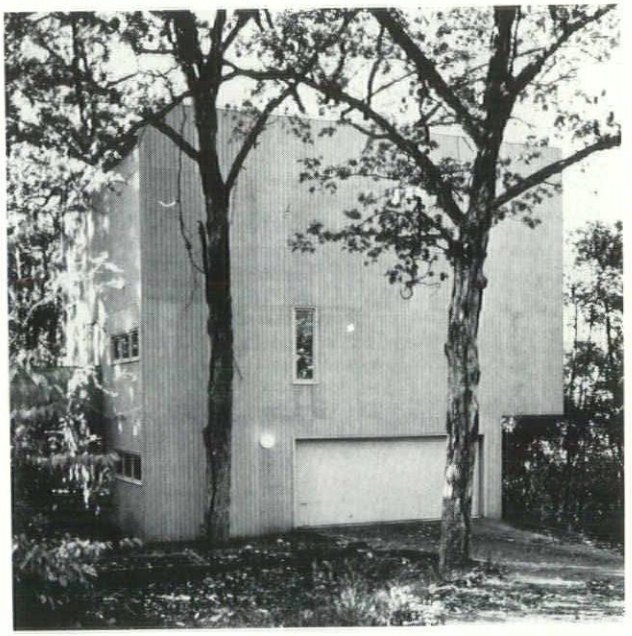
Inevitably also, the process of designing for oneself can be of immense psychological importance. Barbara Plumb, introducing *Houses Architects Live In*, wrote "Architects may have terrific problems designing for themselves. They fear the world in general, and most particularly the critics, will judge their houses as the most perfect architectural statements they are capable of — the very essence of what they, as architects, believe personal environments should be. Fear of failure at such a pressure-filled challenge has blocked more than one architect from putting his or her ego and reputation so totally on the line."

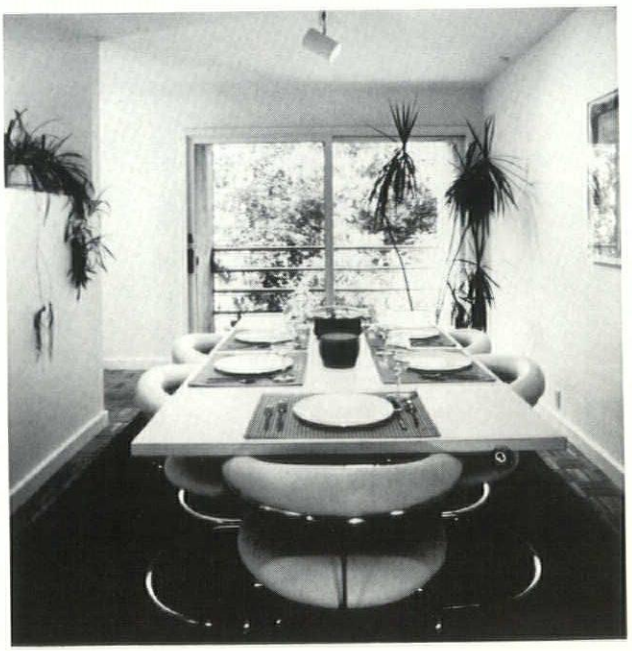
Such a judgement is not the intent here. Instead, it is an opportunity to share houses that, while not always unique or great in an historical sense, achieve living environments that are rich and pleasing with a good deal of style and sensitivity.

Private Residence
D. Bryan Shiffler

Des Moines, Iowa

This house was designed by a young architect for himself and his wife, a school teacher. The site was an acre of mature red and white oak woods in the city. The parcel of land was split from a larger estate thereby leaving the contrast of a woodland setting with close neighbors. While privacy was not a problem in the summer, nearby houses in the winter were to be screened architecturally without the use of blinds or shades. The couple's prime goal was a house that was inexpensive to build, inexpensive to heat and inexpensive to maintain.





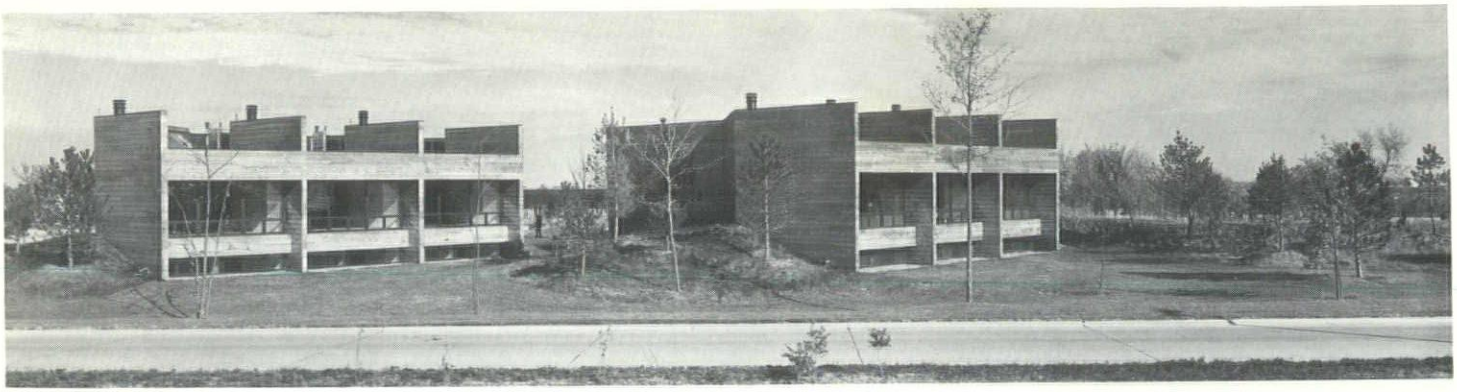
Contractor: W. R. Main Contractor
Photographer: D. Bryan Shiffler
Architect and Owner: D. Bryan Shiffler

Net livable sq. ft.	1,778
Gross adjusted sq. ft.	2,540

Though the couple planned to occupy the house, resale for profit was a mandatory consideration.

The Shiffler house became an exercise in adapting builder materials and details to create a more spatially exciting product. The house was framed, sided and sheetrocked by a general contractor while the owner finished the inside. Drawings were undetailed to promote competitive subcontractor bidding. Care was taken to dimension all room sizes and building elevations to fit modular lumber spacing and plywood sizes. To further economize, all interior and exterior conponents are off-the-shelf products.

The solution became a sculptured cube enclosing as much cubic footage as possible with a minimum amount of skin. Wing walls enclose balconies while focusing the view out into the woods and away from neighbors. The virtual windowless north facade and the large amount of south facing glass combined with its 28ft. x 28ft. x 26ft. high heated volume to produce a house efficient to heat with no unusual construction.



Greco Residence

Ames, Iowa

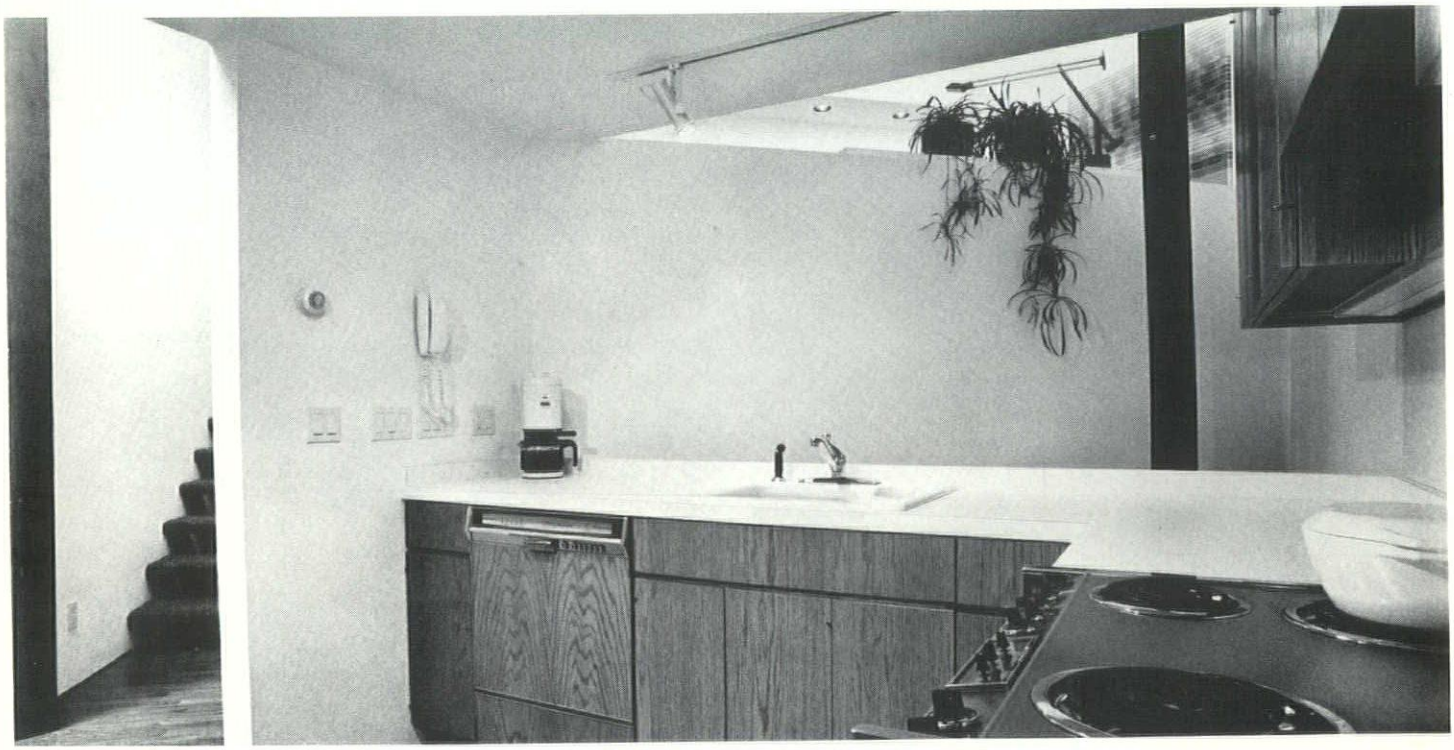
A program for twenty-seven condominiums to respond to upper-middle income families seemed to provide little variation from numerous similar developments throughout the United States beyond encouraging a higher level of energy consciousness and conservation on the part of local developers and the future homeowners. Requirements for living, dining, kitchen, three bedrooms, two baths, garage — along with the need for outdoor private area and study or family space — could, in fact, conjure images of the typical uninspired and uninspiring row house units.

Instead, Ray D. Greco has collaborated to compose a visually effective and energy responsive arrangement of six buildings, staggered along a lineal community space. While energy considerations are given preeminence in the site design process, the execution of the interior spaces provide a spatially dramatic, crisply detailed environment that happily departs from most builder inspired projects.

Each building of the development was given its own vehicular access, defined on two sides by structures and on the third by an earth berm providing a sense of intimacy or partial enclosure. Elevations grow out of a desire to articulate each dwelling in mass, giving each an identity as well as a clear relationship with the others. Dwellings enclose from 1800 to 2300 square feet of living area. Besides the enclosed spaces, a 560 sq. ft. roof terrace offers panoramic views of the city park and establishes an area for private outdoor summer living.

Greco believes that the success of the project relies in part on rotating the garage and living area 45 degrees from the skylight axis, establishing overall interior space quality and offering a welcome alternative to the familiar lineal townhouse planning.

The interior finishing of the Greco condominium was completed by the designer and his wife, also an intern architect, departing, on occasion, from the standard unit and illustrating much care and restraint. Within the plan,

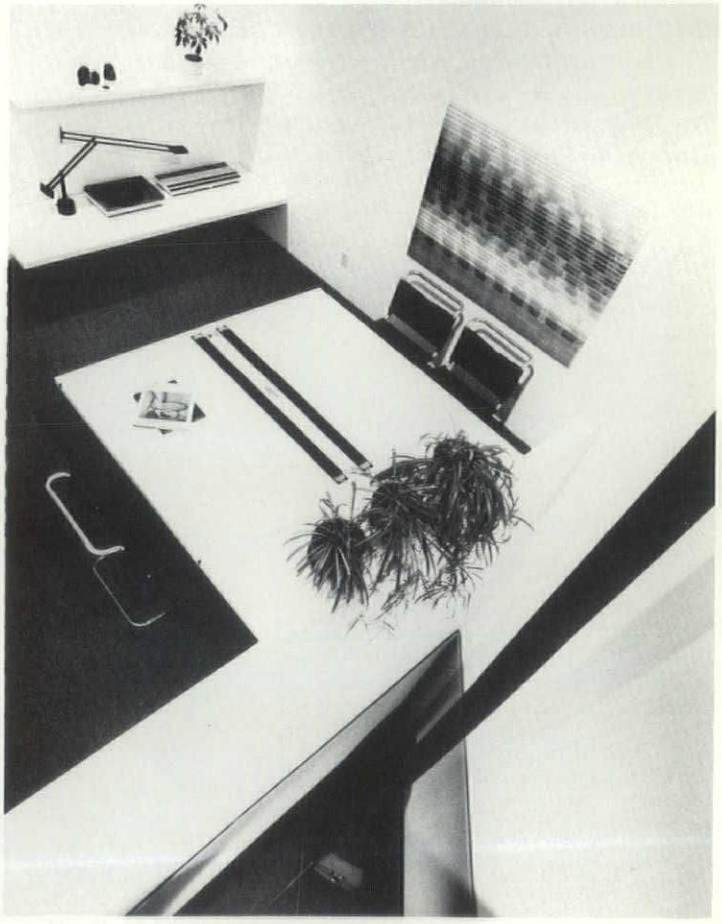


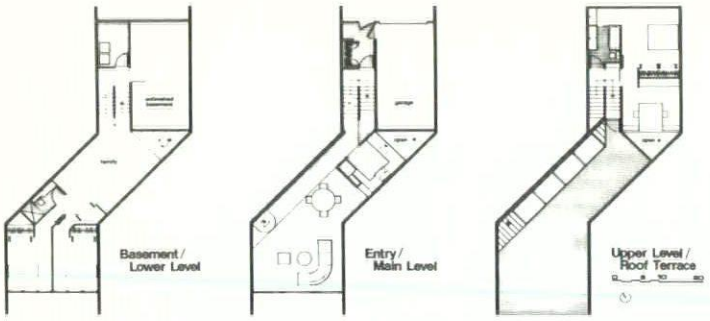
activity areas are zoned vertically. The master bedroom/bath and the study are above, and the children's bedroom/bath and family room are below the main living level.

Open interiors encourage summer breezes to enter and circulate freely. All interior spaces, with the exception of the bedrooms and baths, open into one another at various levels, generating interesting geometric volumes. The study, kitchen and family room plug into a three-story light well, making the spaces continuous and interpenetrating.

Greco has added oak floors to the main level of their unit, and it adds both warmth and a strong visual contrast to the crisp white walls and strong internal forms. Also added were wood-burning stoves (later installed by the developer in the other units as well) at the living and family areas. Twelve-foot ceiling height at the study adds much to the overall spacial quality. The two-story skylight well of the living/dining level, through which the fireplace flue rises, also adds to the overall space and natural light play and is central to the rich visual experience. The roof deck looks upon the study a half story below and to the living level, while the centrally placed kitchen borrows light from both the corridor skylight and the three-story lightwell.

The siting configuration and planning of the dwellings was influenced by solar radiation patterns, wind directions, views, existing circulation, requirements for family living and energy conserving principles. As indicated on the plans, the skylight well is rotated 18 degrees to the east of south. This orientation allows for early morning warm-up of the mass wall positioned behind the skylight. Collected heat is transported through cores within the wall to a return air plenum where it is redistributed to the dwelling for space heating. During the cooling season, the skylight is covered by a manually operated exterior screening device which reduces incoming light by 90%.



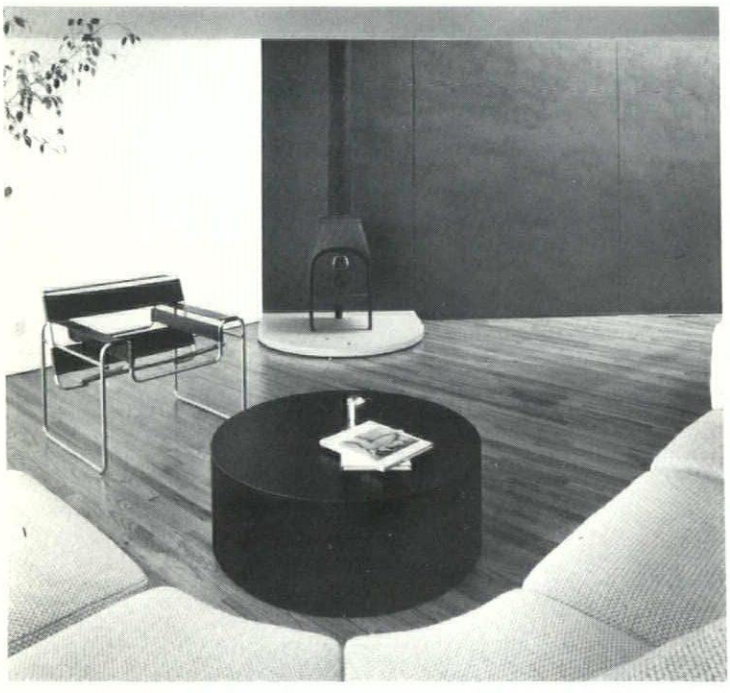


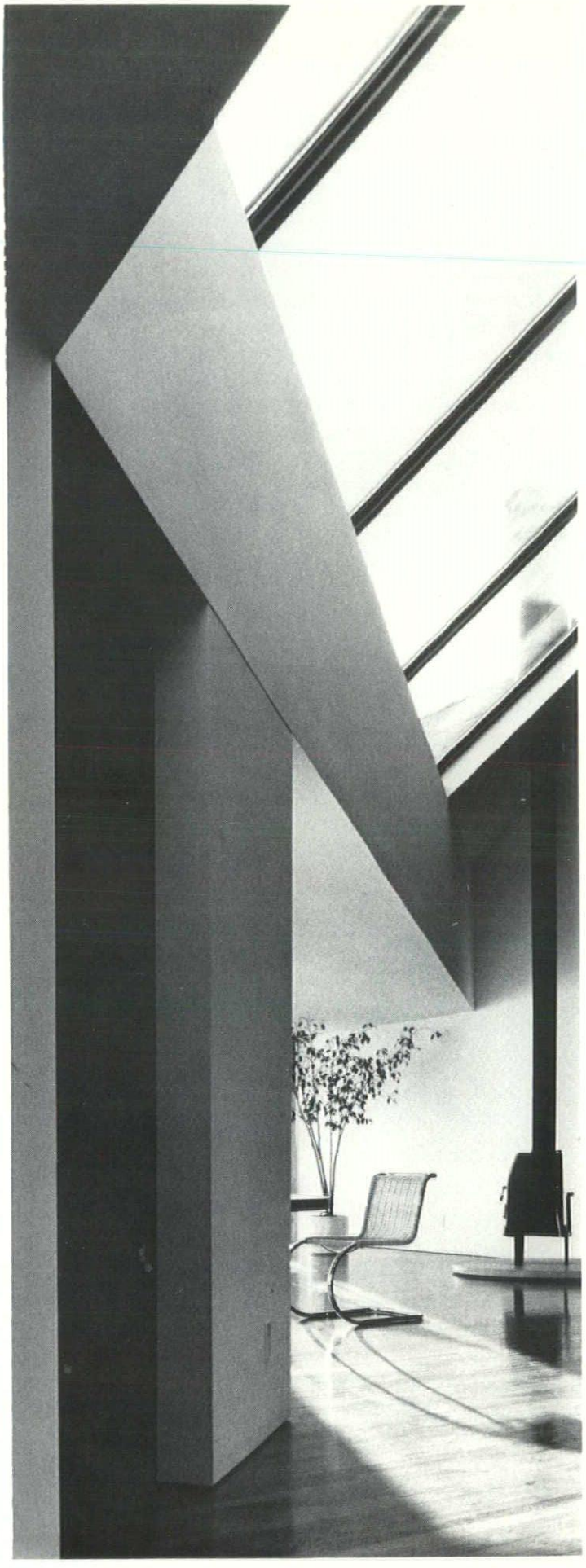
In order to take advantage of southwest summer breezes, and provide private views to all dwellings, the principal fenestration of each building is oriented 45 degrees south of skylight axis. Extensive use is made of triple glazed windows in this orientation. Sun shading devices over these windows provide shading of direct sunlight in summer while allowing extensive penetration of solar radiation in winter.

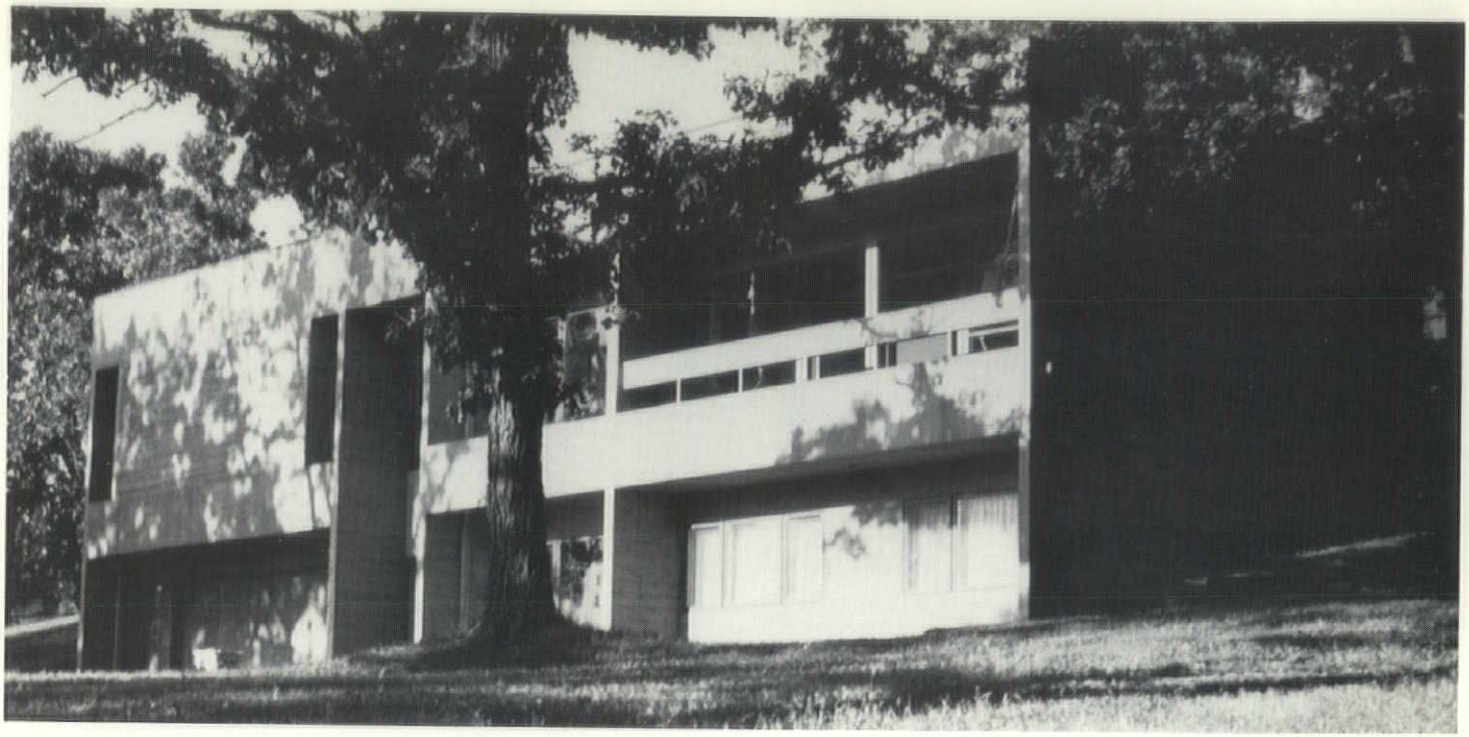
Positioning of the skylight and mass storage wall, stacking and shifting of volumes and thoughtful placement and selection of fenestration has resulted in an interior experience and exterior appearance that clearly demonstrate an alternative to many of the current, highly stylized solar designs.

CREDITS:
Project Developer: *James R. Mazzitelli*
Project Designer: *Ray D. Greco*
Landscape Architect: *The Ames Design Collaborative*
Structural Engineer: *James W. Wilson*
Construction Manager: *Weco, Inc.*
Contractor: *Mazzitelli Construction*
Photographers: *Ray D. Greco, Farshid Assassi*

AWARDS: HUD Cycle 5 Residential Solar Demonstration Design Award





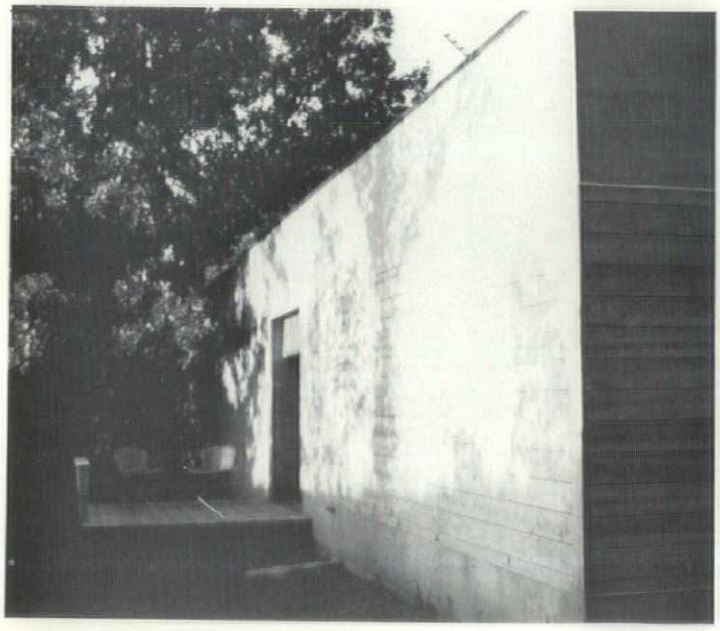


Bussard Residence

West Des Moines, Iowa

Choosing a simple, unpretentious architectural form of natural weathered wood placed on the site to save trees and respect the natural topography has become an increasingly emulated architectural gesture. Yet with nature still providing the brilliance of changing seasons as a dominant visual feature, it is a sensitive gesture that stands far removed from the many other design cliches that are quickly worn out.

The site for Ken Bussard's house is located in a semi-rural landscape along the watershed area of a river located approximately one-half mile to the north. The house itself is placed on a part of the site not initially accessible by automobile, chosen with a conscious understanding of important and varying seasonal views. A creek runs from south to north through the site, which falls approximately eighty feet from the road on the south to the north property line. The high portion of the site to the south is meadow, with a long view to the city. The lower, north portion of the site is heavily wooded with mature oak and hickory trees. The view to the east overlooks the creek.



The family's lifestyle is informal, and the living spaces were to be open, flexible and oriented toward the outside to maximize the exposure to the natural environment. Windows of various shapes and sizes are cut into the rectilinear form in locations chosen for framing the best views.

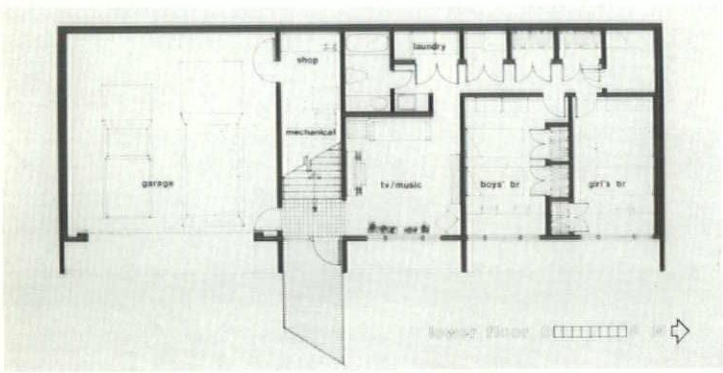
The house was designed with two levels to take advantage of the natural slope of the site, as well as zone adult living above the bedrooms and children's living room at the lower level. The kitchen, dining, living and deck space are open for entertaining, and elevated to maximize the view over the creek and into the woods at the north.

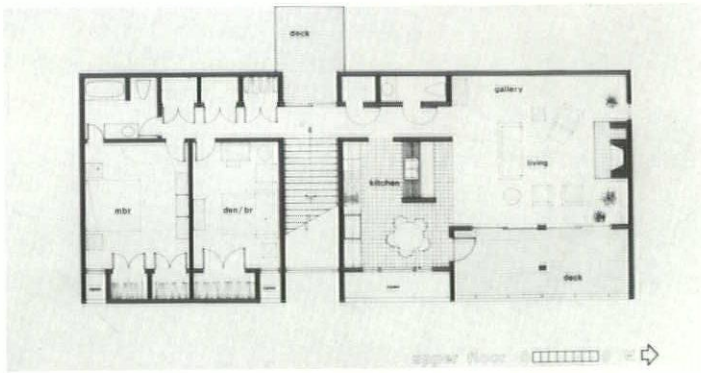
Construction of the house is wood frame, wood floor and roof trusses. All glass openings, with the exception of the window on the north, are recessed for sun protection. The technology of the house is simple and straight-

forward, for economy of standard size materials and execution of construction. Mr. Bussard acted as general contractor for the project and completed much of the work himself. Throughout the process, budget considerations gave direction; indeed, the house was designed and bid three times to comply with initial budget goals.

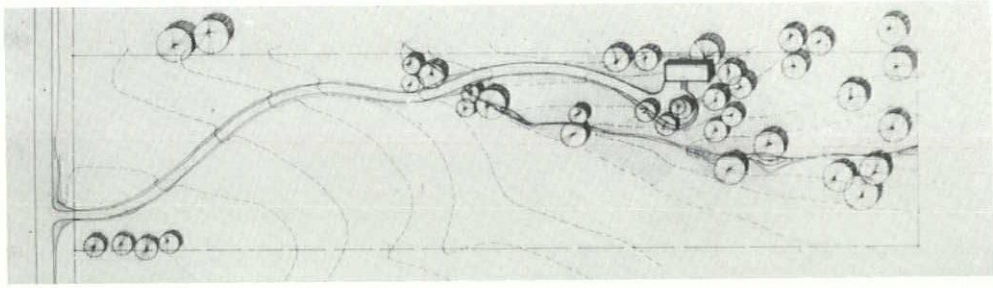
Architectural features include a two-story entry stair with decks at both levels. The exterior is horizontal cedar siding and cedar plywood. The interior materials feature the same cedar siding on the ceilings and selected walls. The remaining walls are sheetrock painted white for art display.

Simplicity of form, maximum use of standard materials and a major portion of the finishing completed by the Owner resulted in a low square foot cost for the house without sacrificing visual identity or abrogating the potentials of a special site.





Site Plan N



Accelerate the Momentum of Success.

You've got the momentum. Now's the time to really pour it on. Beat the competition to the punch here, there, and everywhere.

Today, more companies count on Beechcraft Duchess to sharpen their competitive edge with quick moves that put key people on location to help make opportunity strike.

Take speed. A Beechcraft Duchess cruises at more than 185 miles per hour. A two hour trip in this airplane would take a full working day in a company car.

Destinations. Commercial airlines serve less than 500 airports. Beechcraft takes you to all of them — plus 12,000 the airlines don't serve.

On demand transportation. No inflexible schedules. Beechcraft puts you face to face with your out-of-town customers fast. You can solve emergencies in the field quickly and in person.

These are just a few of the ways you can accelerate the momentum of success with a Beechcraft Duchess. And the net capital cost of this sophisticated business machine is remarkably low for most corporations.

Inquire about our "**Gentle Rental**" plan

Make the first easy move NOW.

Ask for a demonstration

Call (515) 285-6551 in Des Moines
(309) 799-3183 in Moline
(612) 944-1200 in Minneapolis

Elliott Beechcraft

Write on your letterhead for our kit:
"Company Airplanes, Who Flies Them?"

ELLIOTT BEECHCRAFT
Dept. DFH-IA
P.O. Box 100 • Moline, Ill. 61265

For more information, circle no. 11 on your Datacard.

"I see we specified Just sinks on that hospital job. Good choice."

"You bet. Just quality on custom fixtures is great and their Grip-Rim self-rim on sink bowls cuts installation costs in half."

Just. We're getting the nod on more and more spec jobs.

And it's easy to see why. First, with 45 years of experience, Just's quality is unsurpassed. Second, we offer over 500 sink bowl models so you can practically customize every job *without* paying custom prices. If you can't find what you want, we'll fabricate to *your* specs. Just sinks feature a hand-rubbed finish, deep bowls, *total* sound deadening, 18-8 stainless steel. And our Grip-Rim Clip that cuts sink bowl installation time in half gives you a competitive advantage when figuring labor costs. Write for complete information. Just Manufacturing Co., 9233 King Street, Franklin Park, IL 60131.

Represented by:

Sweeney & Associates
400 Fifth Street
West Des Moines, Ia. 50265
Tel: 515/274-2050

Cedar Rapids Ofc:
Frank Hupperts
254 Northpointe Dr., N.E.
Suite 216
Cedar Rapids, Ia. 52402
Tel: 319/377-6607

For more information, circle no. 18 on your Datacard.

Windows and Energy

"Don't Do Anything Until You Know What To Do"

If you want thermally-efficient windows, you must, first, know the different ways windows waste energy, and second, you must know the right solution to each specific problem. The storm window is not a cure-all. Neither is replacing your windows always the best answer.

Let us send you a copy of Season-all's brochure which identifies the problems and solutions.

Dewarco

DEALERS WAREHOUSE CO.
P.O. BOX 646 NEWTON, IOWA 50208

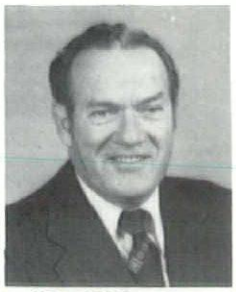
CALL FREE ON OUR WATS LINE 800-362-1873

For more information, circle no. 17 on your Datacard.

Sweeney Associates

"Manufactures Representatives"
400 5th St. • West Des Moines, Ia. 50265
515/274-2050

- **PARKER** Mirrors & Washroom Equipment
- **HALSEY TAYLOR** Water Coolers & Modular Wall Systems
- **SLOAN** Flush Valves
- **STERN WILLIAMS** Terrazo Mop Sinks, Shower Receptors
- **SYMMONS** Non-Scald Pressure Balanced Shower Equipment



"Buck" Sweeney

Frank Hupperts
319-377-6607

- **JUST** Stainless Steel Sinks
- **RAR** Washroom Vanities & Accessories
- **BOCK** Commercial Water Heaters
- **HUMID-AIRE** Humidifiers
- **HYDR-O-MATIC** Sump Pumps & Sewage Ejector Systems
- **DAVIS** Efficiency Kitchen Units

For more information, circle no. 12 on your Datacard.

HAYDITE

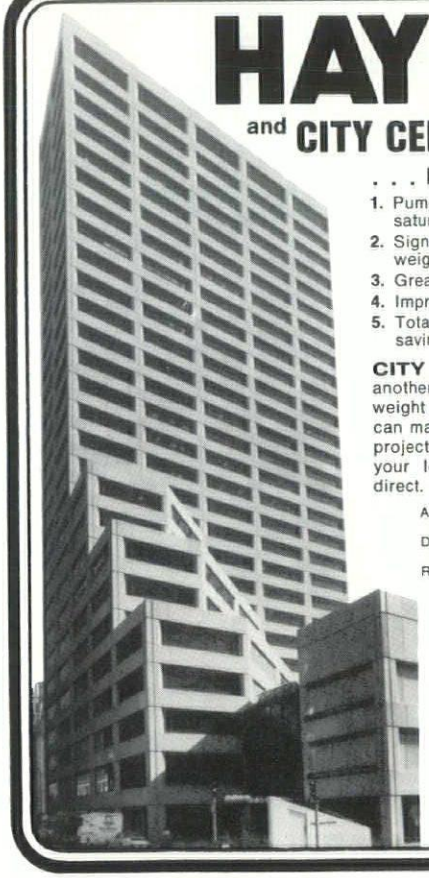
and **CITY CENTER SQUARE**

. . . naturally . . .

1. Pumpability—with vacuum saturated Haydite.
2. Significant deadload weight reduction.
3. Greater fire resistance.
4. Improved insulation rating.
5. Total overall project savings.

CITY CENTER SQUARE—another example of how lightweight concrete made with Haydite can make a big difference in your project. For more details, contact your local supplier, or call us direct.

ARCHITECTS & ENGINEERS:
Skidmore, Owings & Merrill
DEVELOPER:
McCloskey Development Co.
READY MIX:
Stewart Sand & Material Co.



CARTER WATERS
CONSTRUCTION MATERIALS

2440 WEST PENNWAY
POST OFFICE BOX 19676
KANSAS CITY, MO. 64141
PHONE: 816-471-2570

For more information, circle no. 19 on your Datacard.

Changing Idioms

by Doug Wells, AIA

Architect Doug Wells' parents lived on a splendid acreage in Stuart, Iowa until they recently occupied a house he designed for them in Des Moines. This project and their quite different house in Stuart has been thought provoking to him.

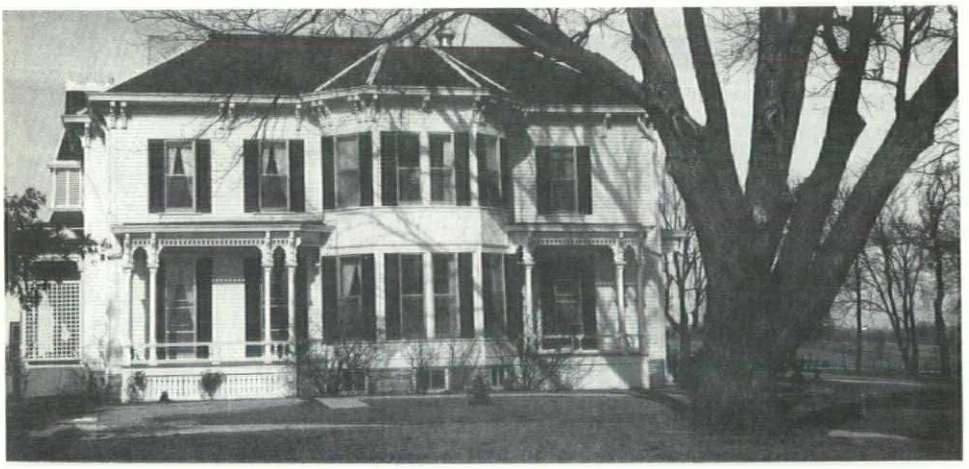
William Foster, architect, was retained to design a house and stable at Stuart for Milton Hollingsworth, a young and prosperous livestock feeder. Hollingsworth owned land around Stuart which was rapidly becoming a railroad center. The parcel that seemed most desirable was a hill on the edge of town on axis with Main Street. This land was also visible from the railway.

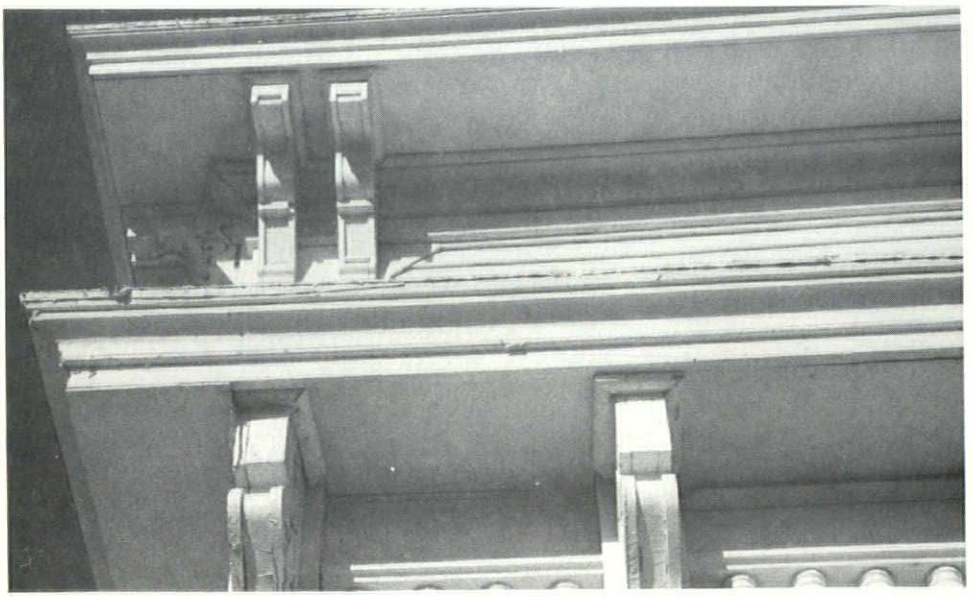
Plans were approved in the Spring of 1878 and work began. The carpenters had the luxury of steam powered equipment which reduced handwork and increased accuracy. Four years had past and Hollingsworth was out of money having spent $8000 on the house and $2500 on the stable. The house was sold to Charles Eustus with 15 acres of land who moved to Stuart to start a furniture manufacturing firm. Eustus died in 1910 and his two unmarried daughters lived there until 1958. The Wells bought the place in 1964 and lived there 14 years.

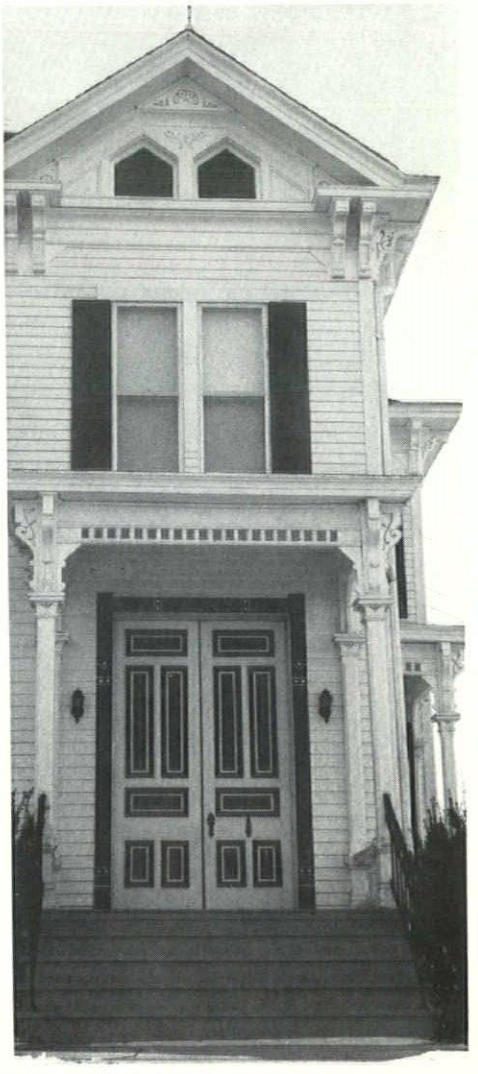
The hill on which the house rests was raised even more by building terraces. Several porches, railings, brackets and ornaments increase the picturesque quality. The roof ridge lines were adorned with lead zigorots making the dusk silhouette dramatic.

The stable was marked by a large ventilating cupola. Most of these considerations appear to have been made on how the house would be seen from town and the railway.

The site planning of the drives and approaches seems







to have been influenced on unfolding views, impact, and surprise.

This exterior detail richness, is carried inside at the front vestibule and hall. North lit stained glass windows lend a mysterious light quality to the stair. This interior detailing, however takes on a more consistant quality throughout the rest of the house. All doors are paneled and cased with similar details. The windows, large and double hung with their sill 6'' above the floor, are cased in a similar shape in all locations. The only exception to this rule is in the servant's quarters where a less elaborate casing is used on the doors and windows.

In contrast, the house in Des Moines is inward turning. The main facade principally offers entrance, circulation, and a buffer to the north. The living spaces open up to the southeast and southwest. A basic 12' x 12' planning module extends out into the site with various appendages such as entrance bridge, deck, screen porch, and garage. This planning module kept the central mass of the house to a 36 foot square plan which economized framing members and reduced the exterior envelope area.

Standard finishes and minimal details are used through-out. Oak doors are suspended in trimless openings with pivot hinges. Casement and custom fixed lite glazing units are joined by a ¾'' frame which is held ¼'' away from all other materials.

Oak parquet flooring and the second level balcony reflect a secondary rotated grid. This grid is further expressed in the appendages to the basic box.

The pallet of color and texture is limited to pure white,

natural oak, and weathered cedar. Interior furnishings are simple and add some contrasting color.

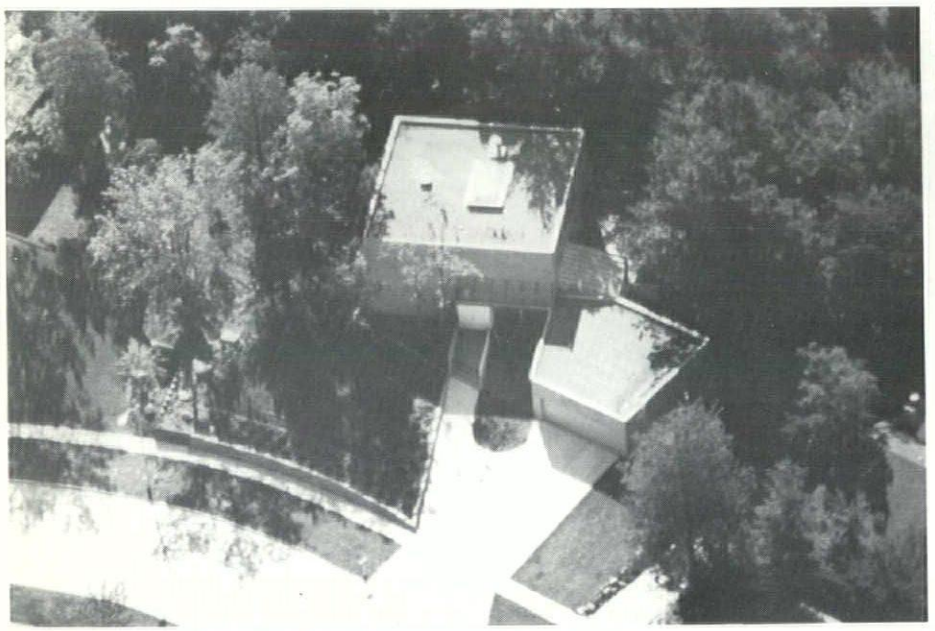
The Hollingsworth house at Stuart and the new Wells residence in Des Moines closely follow the initial design rules laid forth by the architects involved. They each carefully embody a planning thrust deemed important. They each are consistantly detailed, and each is a clear statement of the idiom from which it is derived.

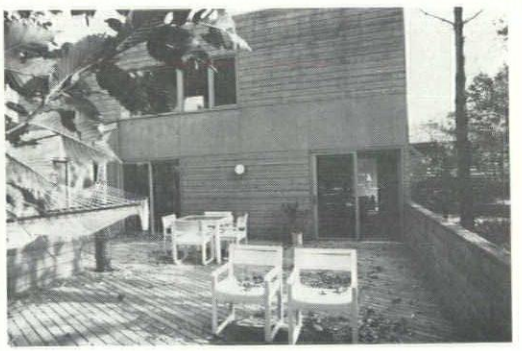
It is hard to compare these two houses. They have tremendous differences in scale, clients and time. Yet, one overriding feature is evident. They both attempted to achieve quality.

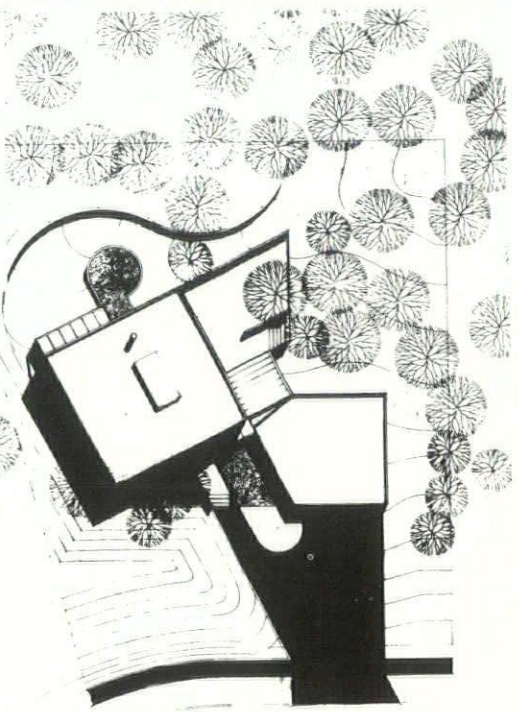
This quality is, to some degree, achieved by ornament in the Hollingsworth house at Stuart. It seems, the more ornament the quality. The porches with brackets and lacework, the ridge lines, the front vestibule and hall, the stained glass windows and stair, all seem to have an additive effect, though different in ornamentation.

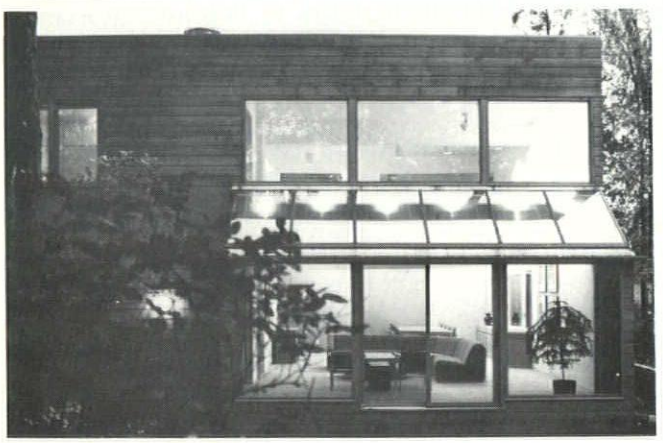
The Wells residence has no ornament. It follows the modernist tradition. It attempts to achieve quality in restraint, simplicity and the functional machine esthetic. Carefully crafted, the intersection of materials is controlled. Detail is kept minimal.

What has happened to the use of ornament today? Perhaps our conviction to the Modernist tradition has been so strong, ingrained, natural, and correct that ornament should not survive. Perhaps today's demand on time in the design process will not permit the development of an ornamental scheme. Perhaps implementing ornament from working drawings to built form is impossible in today's construction industry. Perhaps clients just do not want the trouble and maintainence of ornament when they could have a streamlined, trouble free package. Most likely, however, none of these reasons would prevent the use of ornament if there was a strong, client expressed demand for its incorporation into today's architecture.









NEWS

1980 Community Rewards Bestowed

Concept: Three Shops for M.A. Knutsen

The Des Moines Architects Council hosted its 1980 Community Rewards Program on Thursday, December 4 at the Embassy Club. Mrs. Billie Ray presented the Rewards this year. The purpose of the rewards program is to recognize local individuals or organizations other than architects who have made outstanding contributions to the quality of the built environment. Nominations were made by local architects and the selection of rewards recipients was made by a jury consisting of Mrs. Ray, Arnold Levine of the Des Moines Art Center and architect Ken Bussard, who acted as host for the jury.

Rewards were given to J. Locke Macomber for Valley National Bank, David Kruidenier for his contribution to the development of Des Moines and the Civic Center, and Morris A. Knutsen for his contribution to the development and preservation of Valley Junction (downtown West Des Moines).

Other nominees included Sherman Hill Association, Richard E. Olson, Bankers Life Company, Watson Powell, Jr., Stanley McCausland, Laurent Hodges, Meredith Corporation, Green Meadows, Better Homes and Gardens, Terrace Hill Society and William C. Knapp.

Innovations in Housing Calls For Entries

The fourth year of the nationwide residential design competition sponsored by *Progressive Architecture, Better Homes & Gardens* and the American Plywood Association is underway. The Innovations in Housing competition will be accepting entries until March 16, 1981.

The First Award of $5,000 and Citations of Merit will be presented to those who demonstrate innovation in single-family residence design, either attached or detached. Judges are looking for combinations of the best aspects of today's architectural thinking, economical construction methods, flexible living spaces and energy-efficient systems.

Winners receive both local and national publicity. *Progressive Architecture* features the winning designs in a fall issue annually. In addition, the First Award-winning design is constructed and featured in both *Progressive Architecture* and *Better Homes & Gardens.*

The jury for the 1981 competition includes James A. Murphy, AIA, executive editor for *Progressive Architecture;* James L. Nagle, FAIA, principal of Nagle, Hartray and Associates, Ltd., Chicago; David Haupert, senior building editor for *Better Homes & Gardens;* and Randall W. Lewis, vice president of marketing and public relations for Lewis Homes, Las Vegas, Nevada.

To receive an entry form, write: Innovations in Housing, American Plywood Association, P.O. Box 11700, Tacoma, WA 98411.

Benefits of Double-Layer Insulation Quantified

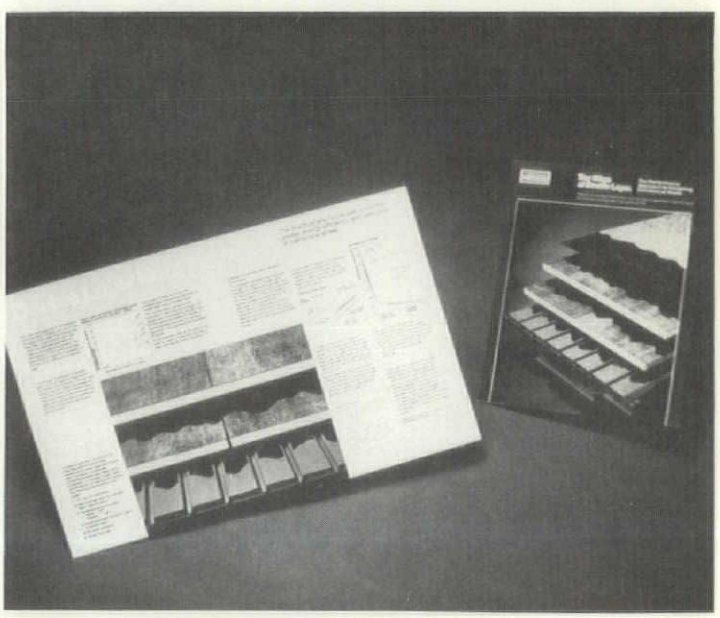
Preliminary results of new research into the benefits of double layer roof insulation for commercial and industrial buildings are detailed in a new brochure from Owens-Corning Fiberglas Corporation.

The text, accompanied by color and black and white illustrations, tells how proper staggering and offsetting of two layers of roof insulation can eliminate continuous vertical gaps between insulation boards.

The process, the brochure explains, can cut heat loss approxamately 5 percent, depending on gap size, and reduce membrane stress 10 percent, compared with single-layer insulation.

A graph also shows heat loss predicted by a computer model for a range of average gap widths and insulation R values. Similarly, membrane stress is predicted, based on the gap's position relative to that of the building joist.

For a copy of "The Whys of Double Layer: The Performance Approach To Insulating Commercial Roofs," write O.P.X. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.



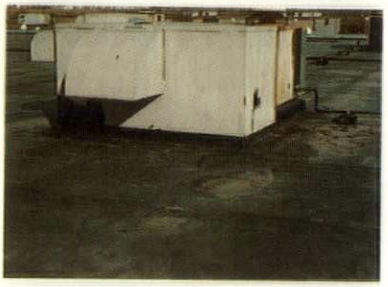
ADVERTISERS' INDEX

FIRST CLASS MAIL

PLACE STAMP HERE

Iowa Architect

% Midwest Advertising Service, Inc.
Reader Service Dept.
5731 Urbandale Ave.
Des Moines, Iowa 50310



DES MOINES AREA COMMUNITY COLLEGE
Building Number 20

BUSSARD/DIKIS ASSOC. LTD.
Architect and Planners
DES MOINES ROOFING COMPANY
Roofing Contractors

Plyroof
ROOFING MEMBRANE SYSTEMS
a Plymouth Rubber Company

Plyroof... a good name to work with.

Single-ply roofing is here to stay. And so are we.

We may have the first single-ply roof in the U.S.

Plyroof™ membrane roofing systems may sound new, but it's from a well-established company—the Plymouth Rubber Company. In the rubber and plastic fabrication business since 1896, one of our materials—neoprene—has been at work on a single-ply roof for more than 15 years—very successfully. It could be the first. That's one of the reasons we support up to a 10-year warranty.

Our range of materials is the most complete.

Plyroof materials have a wide range up to the sophistcated elastomeric membranes which include our Plyseal™ EPDM systems and Plyshield™ Neoprene. That translates into a Plyroof system for virtually any structural design you will ever encounter. They are all readily available from our Massachusetts operations, and our new Nashville, Tennessee facility with capacity to meet the growing demands of the single-ply roofing industry.

Our field support is the most up-to-date.

We have recently completed expansion of our Technical Service Program and are in the process of doubling our district sales management force conveniently located throughout the United States. The result is one of most comprehensive combinations of field technical assistance and localized sales management you will find anywhere for the single-ply roofing industry.

See for yourself.

For complete details write or call:

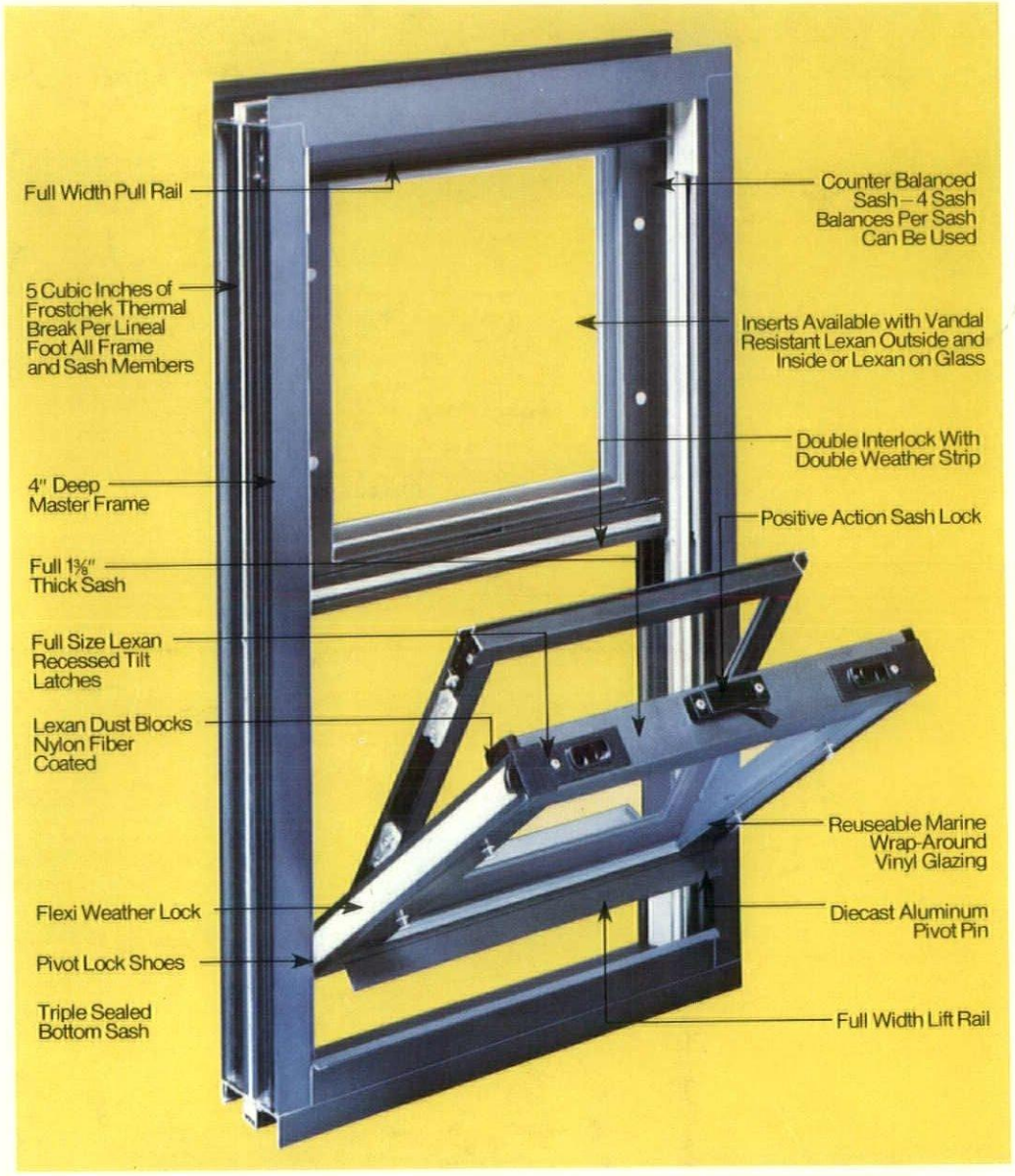
Ther-mo-co Products Company, Inc.
A Division of
Jack Beavers & Associates, Inc.
1848 Fuller Rd. W. Des Moines, Ia. 50265
515/225-9221

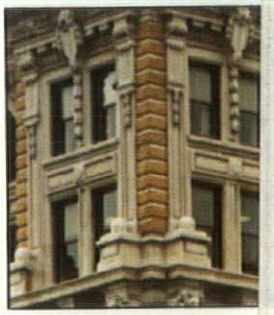
TM - Registered trademarks of Plymouth Rubber Co., Inc.

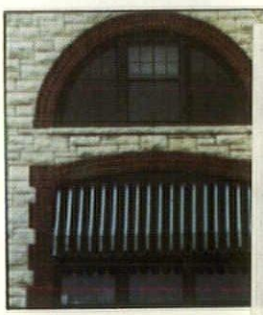
For more information, circle no. 28 on your Datacard.

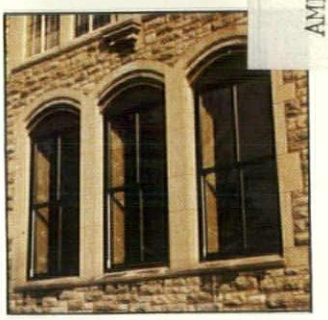
Specify the Best

The *New* VRW 610 Thermal Replacement Window









Installed and guaranteed by our Company with 37 years of Quality Service

The Advantages:

- Unique "Frostcheck® " thermal protection
- Outstanding structural integrity
- Appealing aesthetic design
- PLUS...Tough vandal-resistant poly-carbonate glazing

We have hundreds of installations of the nature shown above in the Iowa area

IOWA ARCHITECTURAL PRODUCTS, INC. • 801 33rd Ave. SW, Cedar Rapids, Ia. • **800/332-5235**

For more information, circle no. 29 on your Datacard.