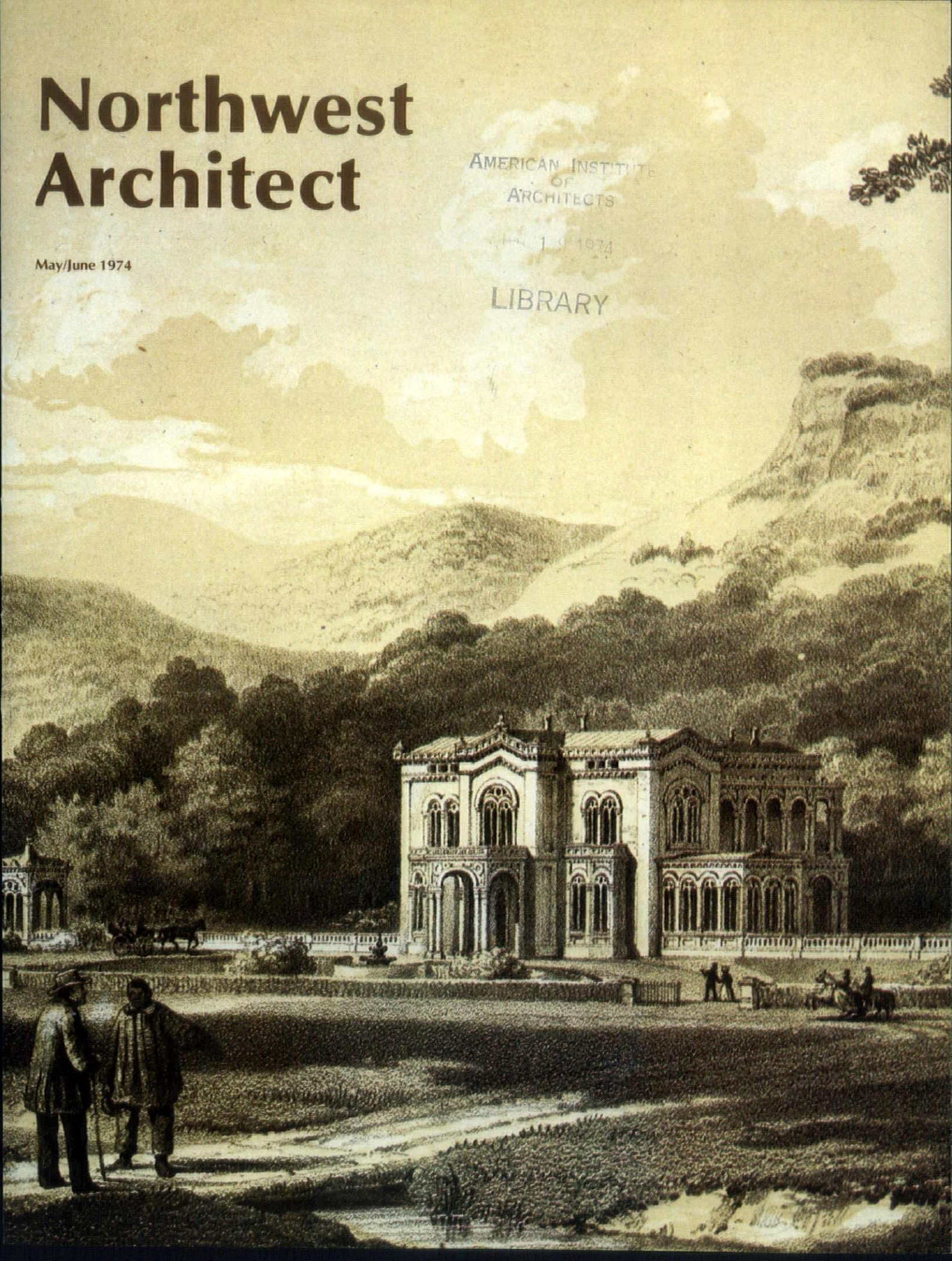
Northwest Architect

May/June 1974



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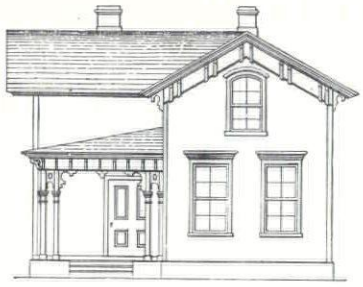

In this Issue . . .

"My home is my castle" because it has all the security, grandeur, elegance, private stairs and hideaways of the kings. The home is the framework around the inner life, it is the armor against the elements, it is in the beginning and it is in the end . . .

This issue of the Northwest Architect is dedicated to those who will want to build or buy a house and are awed and exhilarated by the responsibility and consequences of their decisions.

The articles and photographs contained herein are just an invitation to you to visit your architect and consider the possibilities. In designing a new home for you or adapting an existing one, his task will be to convert your desires into a work of art which will enrich your life and the lives of your neighbors. Editor

Editor
Bernard Jacob AIA
St. Paul Building
Saint Paul 55102

Associate Editor
Fred Miller, Jr.

Graphic Design
Frank Kacmarcik

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Executive Director, Daniel J. Sheridan
100 Northwestern National Bank Bldg.
Saint Paul, Minnesota 55101

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Cover Photo: "A Country Residence" was created in 1852 by Samuel Sloan, architect. From his original design collection, *The Model Architect*, Volume I.

So You Want to Build a House . . .

By Bernard Jacob, Editor

You have decided that perhaps, after all, you may indeed want to build a house rather than buy a ready-made or even pre-owned house. It's a risky decision and, as with everything else, unless you have done it before, it can be quite worrisome.

There are many reasons to justify buying a ready-made house. You can look at it and decide whether you like it or not. You can tell whether the rooms are too large or too small and whether the kitchen is adequate. You can see the area that is the yard around the house. You can also see how the house fits in with the neighbors' houses. In other words, many decisions have already been made, and you can pass judgement on them. You can decide whether this particular house matches your needs and your pocketbook. The former will, as with everything, exceed the latter, but then a few sacrifices are always necessary.

On the other hand, if you are going to build, you will be making many of these decisions yourself. You will have to decide on the size of the rooms, the relationship of the rooms to each other, the location of the house on the land, and the relationship of your house to the neighbors. The architect you choose will counsel, help and advise you and will also, on your behalf, direct the builders.

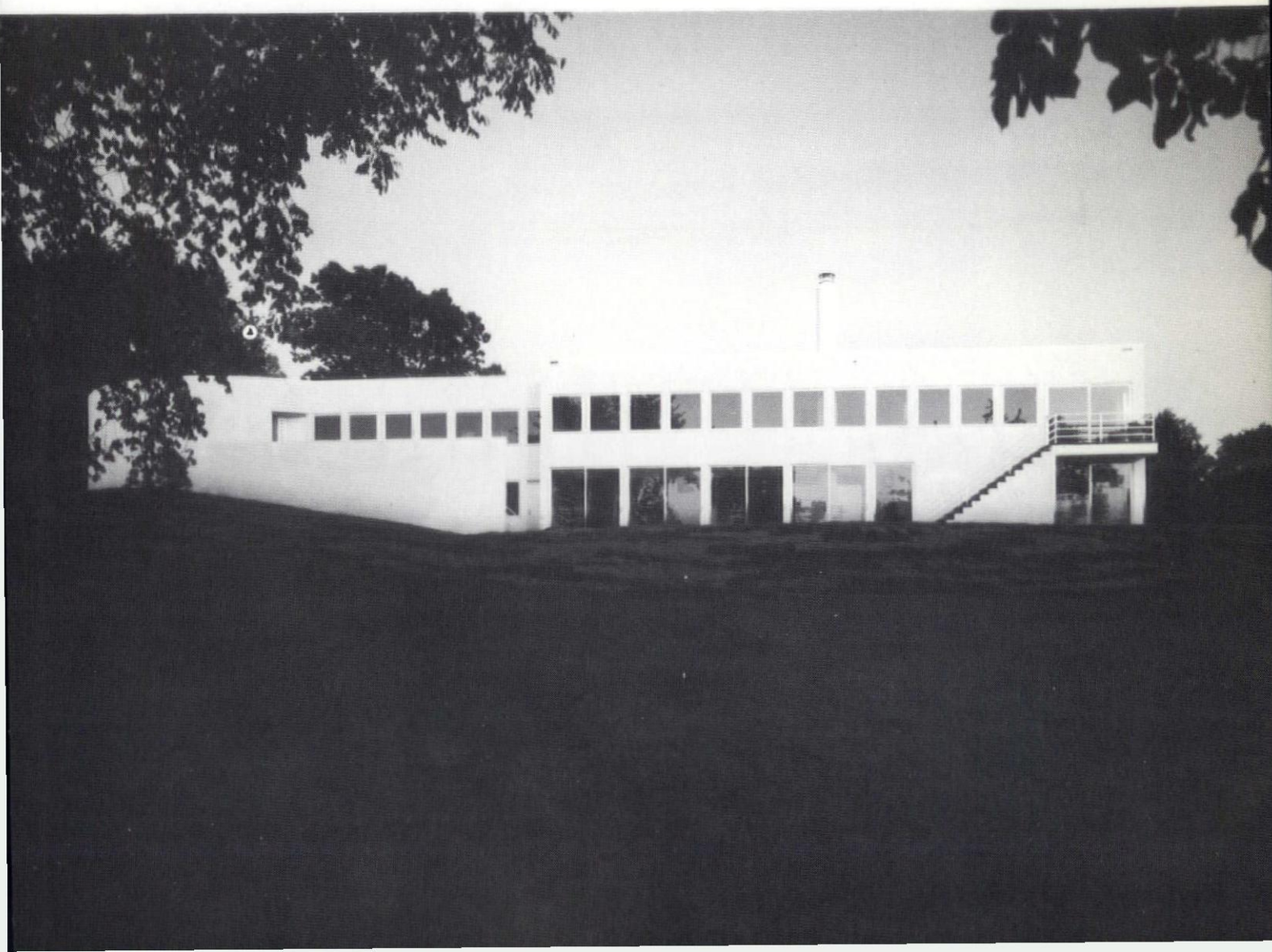
The best architect for you is a registered professional, licensed by the State Board of Registration to practice in this state. He is usually genial, well educated, honest and intelligent. Your own personal architect is above all the one that really turns you on, and if he turns you on, chances are the chemistry will work in reverse as well. The house you build will be the result of that mystical, exasperating, exciting, exhausting and rewarding chemistry or alchemy that you and your architect

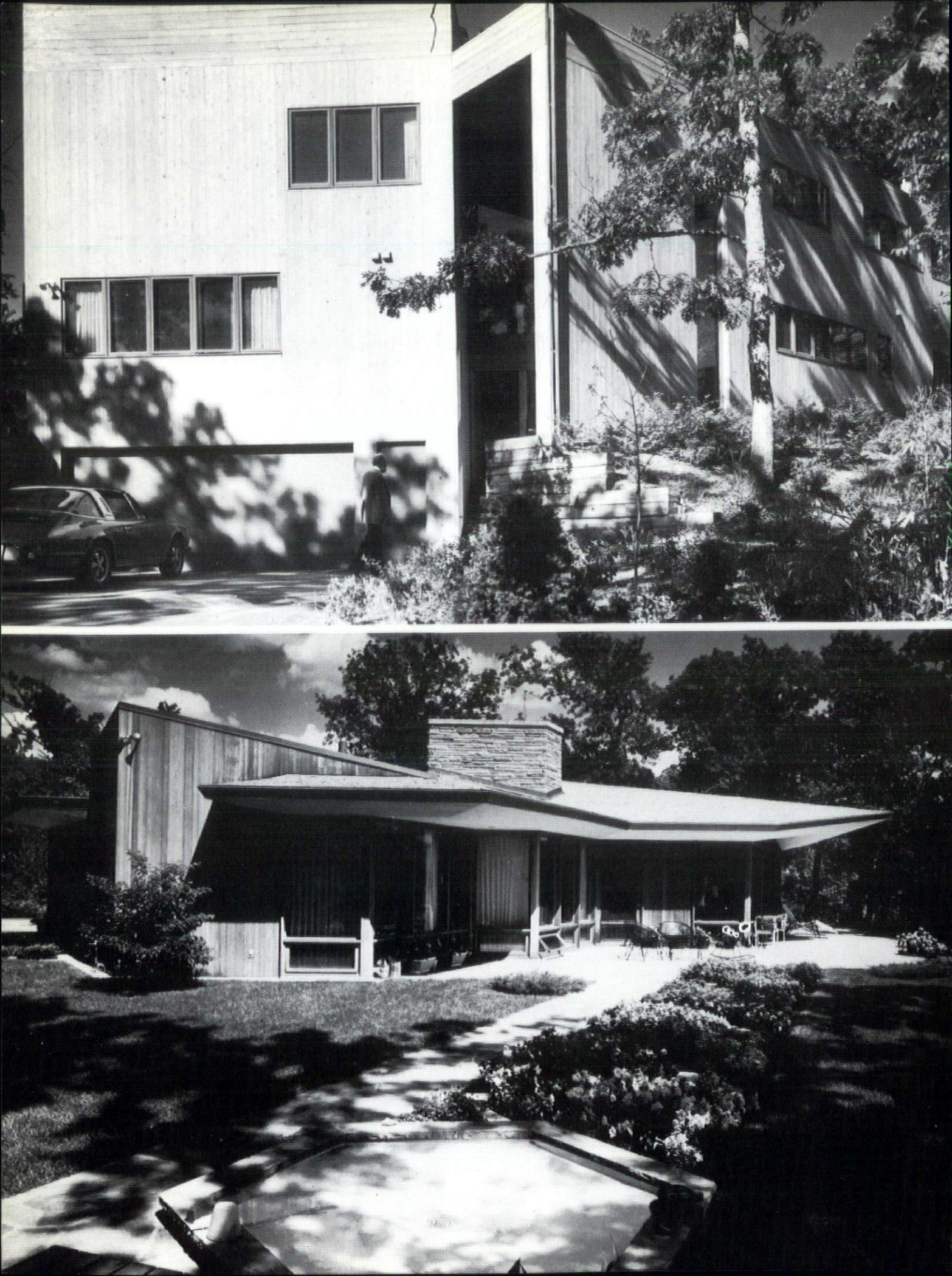
will establish and nurture between yourselves.

Nothing is as fraught with traditions, prejudices, archetypal memories and superficial cliches as this basic shelter, the home. Since most of us have many of these same ingredients in our make-up it is hard to think clearly and rationally without a great deal of discipline, patience and care. The best architect and the best client will make the best house. Therefore the best client must always find the best architect.

Can you afford an architect? You can afford an architect if you can afford a house. You could have gone to a builder and had one of his stock plans adapted and thus allegedly save the architect's fee. Of course, even the builder has to pay a draftsman to draw up the adaptation, or the builder's lumber yard has to pay a draftsman . . . A good architect, your best architect, will give you a much better house, usually for less money, even including his fee. And there's no magic to his work. He will achieve this by using materials directly and economically, by designing shortcuts for standard building procedures and by exploiting inexpensive and common-place materials. The floor plan will ingeniously provide space where it's needed the most and keep it out of where it's needed the least. He will also make sure the house is built the way it says it will be built.

In building a custom house, the question of resale need not be a threat or a fear. Quality houses, architect designed houses, have proven to have a high resale value. As to the degree of customizing that is permissible, it is important to remember that the house need not please and need not be sold to the entire population of Duluth. One buyer only is needed and the odds are very much in your favor there's another discriminating family who would like and appreciate your house.





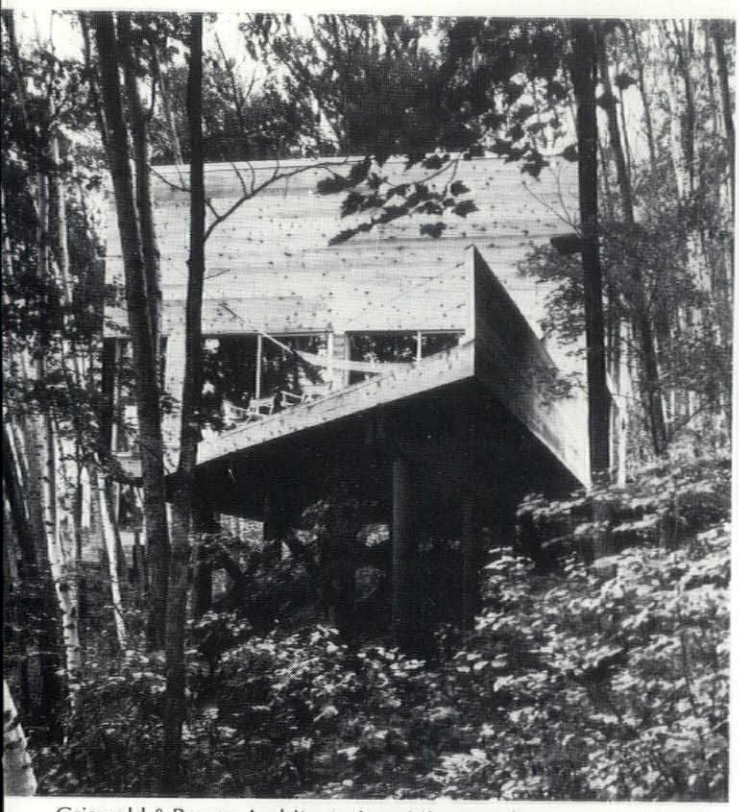
The House Belongs

The house belongs to the site when it is designed to fit the landscape, the mood, the smell, the view, the texture and the materials in sight. A house can gently grace a site, softly reinforcing the contours and the vegetation. It can also dramatically assert itself, assert itself as a man-made object upon the land, showing all the precision and sophistication of a rational creation. To help you in the early decisions of buying the land and locating the house the architect will become your unremitting guide.

The Question of Style

You probably like the Colonial style. It is difficult to dislike it because it is the authentic architecture of its time. Today's architecture reflects the vigor, energy, imagination and values of our time. A contemporary house will reflect this and will be the best answer to housing your needs today. The style, the form, the expression, in today's architecture, is of secondary importance. It is second to the requirement of solving basic functional needs. After the plan, the number and situation of the rooms, the needs for privacy, sun, and wind, have been resolved, the form and the style, will naturally emerge.

The materials will be used in a straightforward simple manner, the design will be economical and considerate of its neighbors and you will have a contemporary house, the best house for you.



Griswold & Rauma Architects, Inc., Minneapolis

Arthur Dickey Associates Inc., Architects, Minneapolis

Eldon Morrison/Architects, Inc., White Bear Lake

Some Common House Styles and Near-Styles

By Thomas Blanck

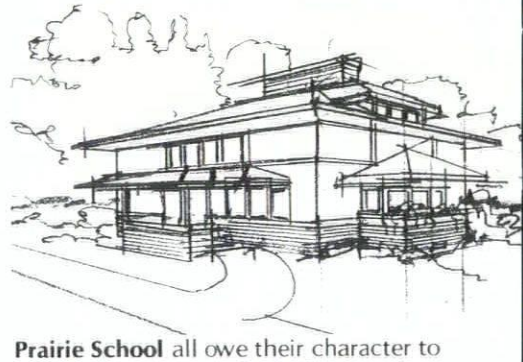
Chalet: Usually consists of an ordinary house with funny trim on the front. Expensive models have false beams and nonfunctioning shutters scallops are a must. More elaborate chalet style may even be architect designed and employ impractically steep roofs which enclose too little area and too much volume.
Spanish: This term covers a style of exterior and interior cosmetics where if seen in Spain, would be diagnosed as purely American. It is typified by arches and half circle cut outs above square windows and may have simulated stained glass, along with "neo-rustic" stucco work. More elaborate specimens of this species may employ imitation arcades and imitation adobe, a la Zapata style. A stray clay tile may also be discernable.
Contemporary or contemporary ranch style: is used to denote a house that cannot be fit into any of the other current popular styles but may owe its primary design inspiration to the "Ranch Style" of the development tract of the 1950's. Segmental arches of plywood over the garage and porch posts, rustic siding and a wagon wheel in the yard help to identify this style.

Suburban Colonial is differentiated from earlier variations on the colonial theme by its complete misuse of details and their attachment to the outside of any old plan ranging from split entry to split level. Shutters, columns, bay windows, cottage doors and snap in window grills of plastic are a must to turn these uncluttered window areas into charming pieces of colonial nostalgia.

Tom Blanck, a graduate of the School of Architecture at the University of Minnesota, is associated with Valerius Michelson AIA, Saint Paul. He is presently working on the restoration of the Blair House (formerly the Angus Hotel) in Saint Paul.

Alternative Life Style Houses. A big new name for the technological child of the tarpaper shack of the 1930's. Usually owner-built of native low energy materials, may incorporate geodesic domes, windmills, salvaged materials and possess a freeform design and floor plan well suited to the ultimate in casual living. It may be the only hope for people of the future who choose not to spend 40% of their time working to pay the friendly home town banker.
Provincial: That expansion bungalow whose attic, basement and breezeway have been finished by the dedicated do-it-yourselfer. Better examples can be expected to meet the building code. Common characteristics are window stairs, trap door to basement, low energy electrical entry (a true asset today) single hung windows that slide into the wall and doors which swing into each other (this guarantees that at any time 50% of the doors are closed or half open.)
Farmhouse Style: for those lucky few who can find these engulfed by the big city. They are an excellent place for families where a little more yard is desired and for those whose life centers around life in the kitchen. Best clue to one of these is a boarded up front door and a rocking chair on the back porch. Plumbing can be a problem. Bathrooms usually are off the dining room.
English Tudor: Popular as a type in the 1930's and combines stucco halftimber trim and stonework. Older specimens are preferred to the modern examples of half timber trim and tudor effect as most of the contractors building these today do not know what the original structural function of half timbering was and hence misuse it as a decorative element.

Neo Mansard: This style offers some true amenities. The overhanging eve provides protection from sun and rain for the first floor windows and doors as well as acting as a device to unify the design of the house and at the same time lower its apparent height in those circumstances where that is desirable.



Prairie School all owe their character to the local designers who built upon the genius of Frank Lloyd Wright and constitute one of the more important regional styles. It is characterized by horizontal compositions of brick, stucco and strip windows. Most employ hip roofs. The interiors are often prized for their livability, openness and fine detailing.

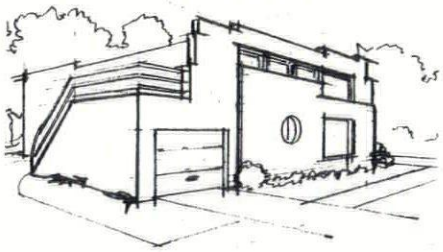
Rambler is a term formerly used to describe a suburban two car three bedroom house which now applies to any one story house characterized by a flow diagram common to the bungalow of the 1920's. It is a close relative to the mobile home where the usual room arrangement puts the front entry in the living room with the closet door behind the entry door when open. Access to the bedrooms is through the living room to the dining and in finer models, thence through the family room. Extra children get the basement bedroom.

Greek Revival is commonly associated with the early Victorian style in the Midwest. Strong neo-classic lines give the exteriors a pleasant formality. Interiors are most commonly Victorian in concept but some are derived from Colonial central hall plan types.

Gothic. Carpenter Gothic and Carpenter Frieze styles often show local influences and at times approach fine specimens of folk art. It owes its existence to the availability and fascination with newly available techniques for working with wood and a fascination with the last gasp of the Gothic style.

Victorian is distinguishable by a general massive quality, frequently asymmetric and decorated with a combination of original and stolen motifs. Important species are "Nubby Victorian", The Mansard Style, etc.

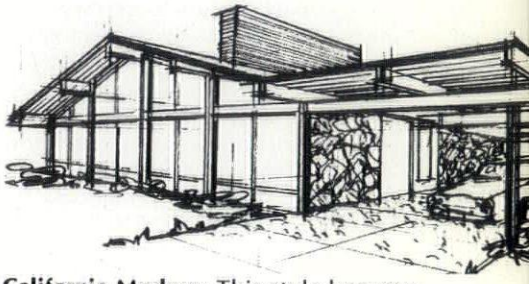
Romanesque revival was common in the 1880's and is currently undergoing a revival of popularity in the midwest. Brownstone, heavy masonry arched openings, stained glass, hipped roofs are characteristics. Plan and spatial concepts are pure Victorian with greatest eloquence in the area of the double parlour. Architectural details are taken from all preceding styles and at times become bizarre.



Art Deco and the international style, are represented by numerous examples in the Twin Cities. Most of which even today, 30 to 60 years later, prove to be durable and livable residences and are characterized by open plans, good orientation, careful site analysis, plain walls and some decorative features of an unobnoxious type.

The **Fine Reproduction.** Even today builders may be found who can recreate Colonial, Federal and Early American residences. These can be seen in some of the more opulent suburbs. While one may wonder what Jefferson's reaction would be to the many imitations of his "federal style" which was the ultra modern of his day there is little doubt that the well done reproduction of these comfortable homes does provide a quality living environment. It is tempting to think however that people like Jefferson and Franklin would be far too interested in low energy ecology and the possibilities of modern architecture to take even a second look at the federal style.

Minnesota Modern: Related in design and function to good modern design in all parts of the country, but with a special emphasis on the needs of the midwesterner and his environment.



California Modern: This style became relatively popular in the Midwest due to a large degree of energy consumption during the recent past. It makes use of large glass areas, many doors and is well suited to California and the Southwest. The concepts, use of materials and general design may be quite attractive but unless site, orientation and insulating and weatherproofing are well suited to this, our nasty climate will ruin the effect.

Tri and **Quad level** schemes mean that living spaces are scattered throughout the three or four levels and guarantees that you must wander through several living areas to get to the least accessible parts of the house. The frequent stair climbing develops leg muscles. ■

Le Corbusier said that the house is a machine for living.

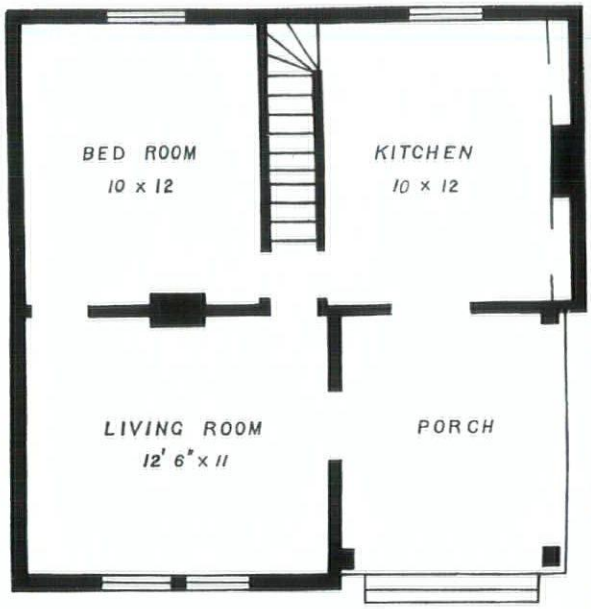
It is indeed a machine and the kitchen (despite all its symbolic charges) with all its appliances, is a walk-in feeding machine. The bedroom is a place for sleeping. The garage is a place for cars. But life is not that segmented, and human beings do not function that way. They make love in the kitchen, they eat in bed and they store their most valuable assets in the garage.

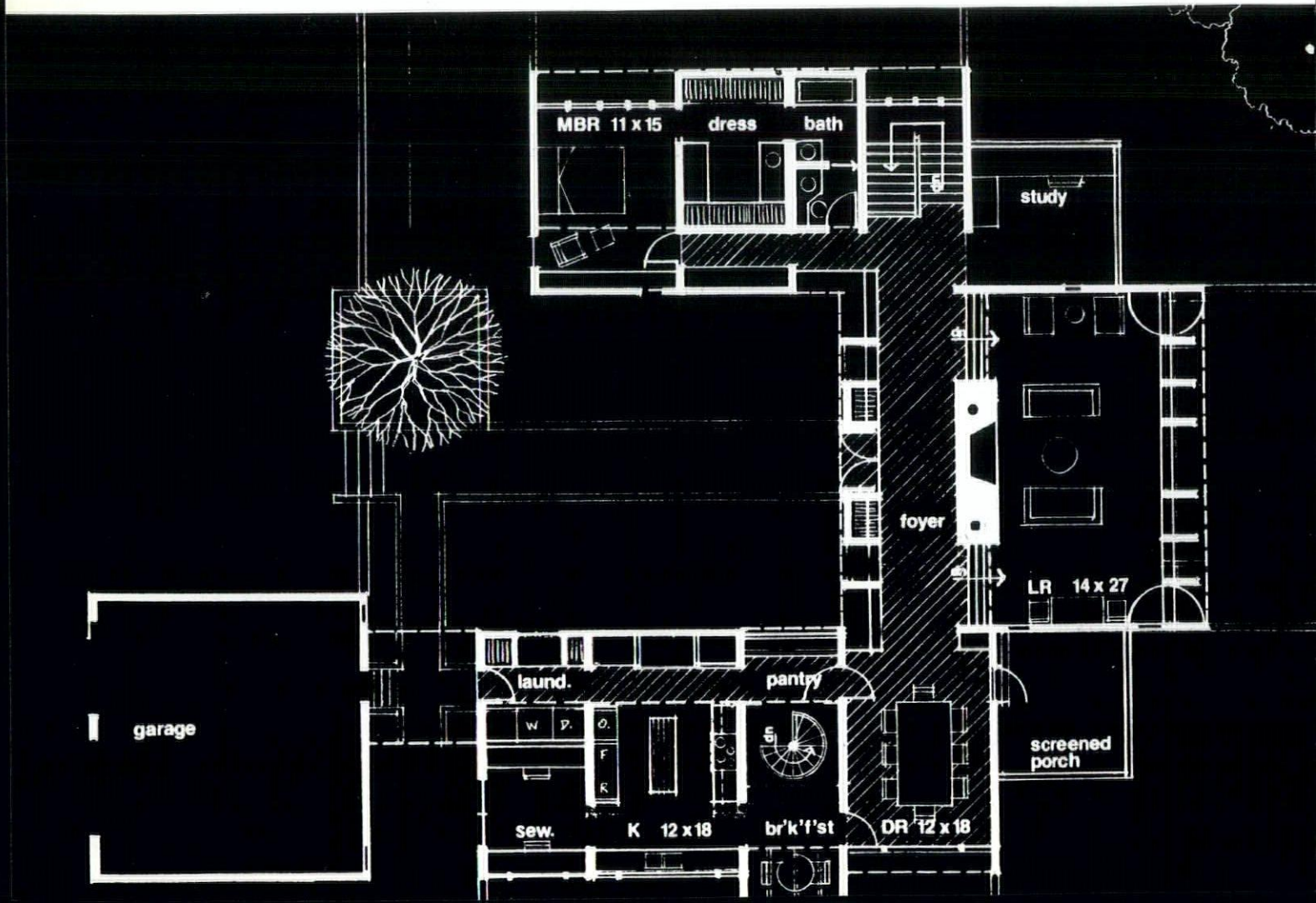
It will take all your courage, all your wisdom, all your inner resources to arrive with your architect at a good balance, a sensible ratio of space assignments for different activities. Your architect, in his wisdom, will have to draw on his insights, his interpretations of your visions to help you make the right decisions. Editor

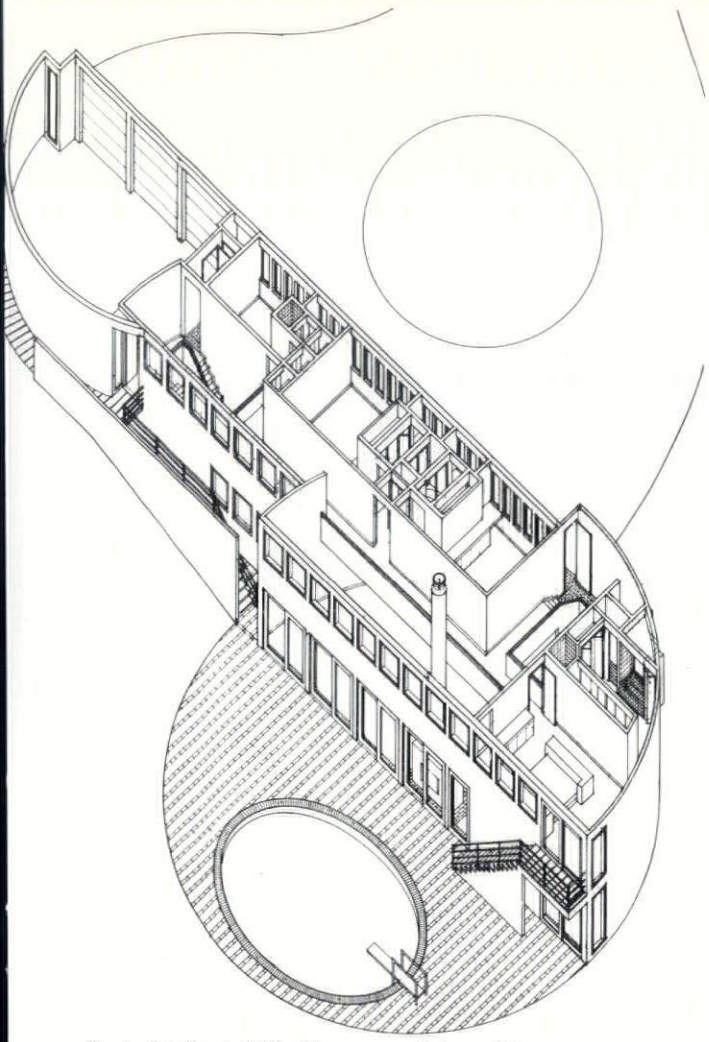
The Floor Plan

The earliest plans were drawn in the sand with dried sticks. The latest plans are computer drawn by transistors. Yet all these plans are simply symbols. A plan is a diagram, it symbolizes relationships. It describes paths, routes, highways, activity centers, resource centers, energy centers, recuperation areas. It indicates the progression, sometimes procession, or circulation from one room or space to the other. Thus it also reflects your life style, whether it is tightly structured and formal or very very casual and relaxed. A good floor plan is a work of art. Like all art, it is a symbol, but it is a very powerful symbol, it tells of people living together and how they do it.

The time you and your architect spend arriving at a floor plan will come back to you a thousand times, and before the end you will be able to read plans as rapidly as you read these words.







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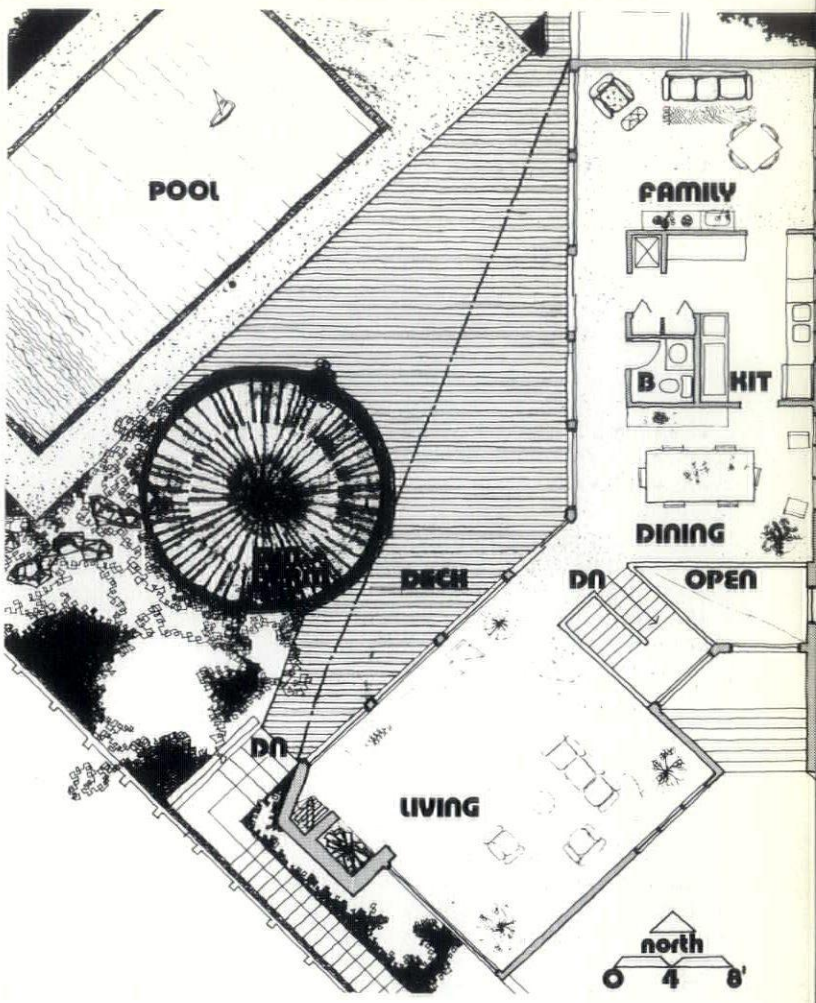
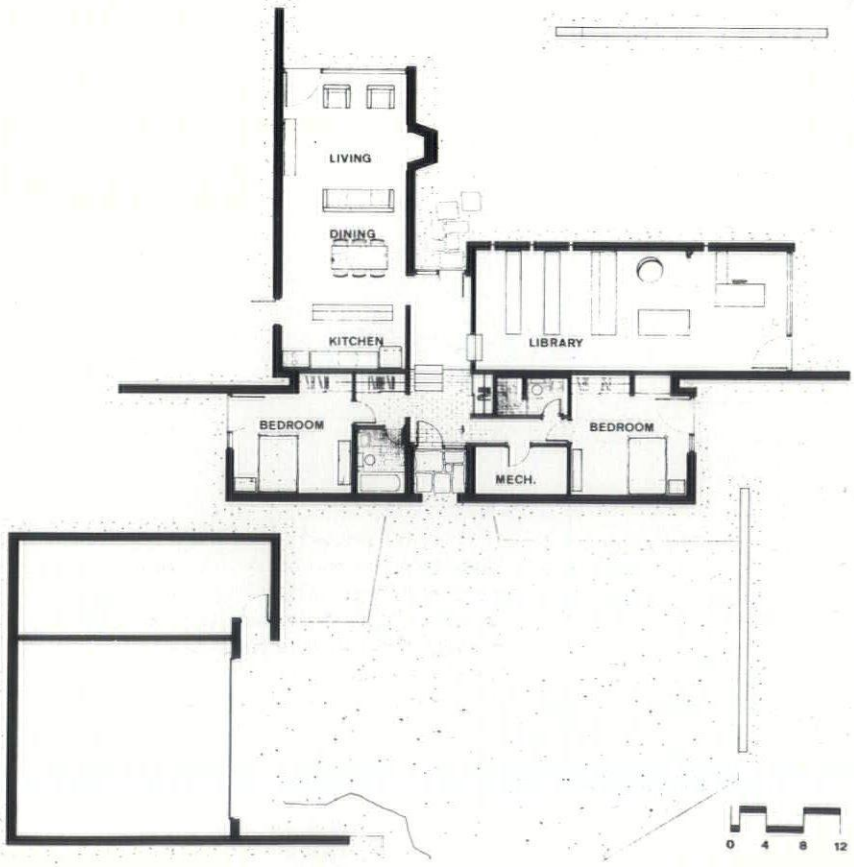
The Hodne/Stageberg Partners



Marcel Breuer, Architect



A Plan is a Plan When it Works

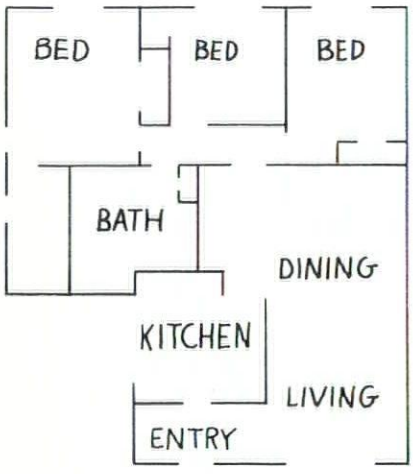
By William Vievering

Planning a house is an extremely "personal" experience. There is no such thing as a "perfect" plan that fits everyone's needs since every house should "ideally" be tailored to fit the needs of it's owner and should actually reflect his personality.

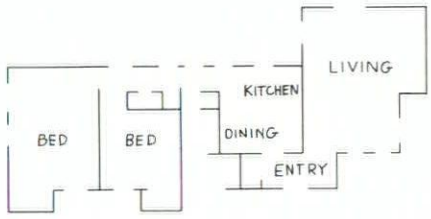
It is likely there are not two families that have exactly the same needs and personality traits therefore, theoretically, there should be no two houses exactly alike. However, it also becomes obvious that nearly every house in existence will have to suit the needs of several owners since "one owner" homes are an extreme rarity. Logically then, there should be some unifying factor that will make each house adaptable for several different owners and not just the owner it was designed around.

The unifying factor described above is called "circulation" and this is singly the most important factor in planning a house. There are some basic factors in good circulation which seem unbelievably obvious to a trained eye but are so often violated by home builders and accepted by unknowing clients that one can only sit back and shake his head in disbelief. It would seem at times that house planning has actually retrogressed since the day of the Ancient Greeks and Romans.

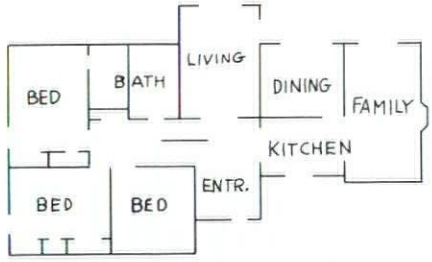
Often publicized plans are similar to those shown here.



In this floor plan, upon entering the front door, you are all right if you are planning on going to the kitchen or living room. However, if you are going anywhere else in the house, you are forced to walk diagonally through the kitchen or the living and dining rooms. All three of these rooms, in effect, become corridors and are extremely unpleasant spaces. In this case I have also included a perspective of the house to illustrate the point that anyone who would create this floor plan would also create the contrived monstrosity referred to as being "contemporary, rustic, design," a favorite cliche now being used by home builders.



Here is another plan which uses the kitchen as a corridor to reach every room in the house except the living room. How many wives would go for this floor plan?



This plan could have worked but the planner neglected to provide any connection between the living and dining rooms and thereby necessitates going through the entrance foyer to serve snacks or in any way communicate with the people in the living room.

I have used these examples to illustrate that many home builders and package plan dispensers even violate the most basic principles of house planning. Many builders also indicate a complete lack of knowledge in the use of materials and even sometimes in the basic elements of good construction. This is to say nothing of the intangibles such as beauty and the personalized approach to planning which plays such an important role in the design of a home.

One inherent difficulty in the planning of a home is the fact that nearly everyone considers himself a planner of sorts. This is certainly not all bad since input from the client is obviously a very necessary part of the planning process. However, in house planning, as in many other things, a little knowledge can be a dangerous thing. It is fine to read an article on brain surgery but, upon completion of the article, you generally don't go out and practice it on somebody.

The architect's role is to translate the needs, desires and personalities of a client into a workable package which, when combined with the architect's knowledge of circulation, materials, construction methods, budget and aesthetics, will ultimately create the "dream home" that every client is looking for. It is a proven fact that the architect's fee can be paid many times over by the judicious use of space, materials and construction methods which often escape the average home builder.

One other factor which I have not mentioned which plays a very important role in house planning is site planning. Ideally, the architect should even be involved in the selection of the site since it is very possible that the ultimate floor plan may actually evolve from site utilization. ■

William Vievering, a graduate of the University of Minnesota's School of Architecture, has been in independent practice in Saint Paul since 1970.

Expansions and Additions

When you design a house, it is wise for you and your architect to briefly consider the possibilities of expansion.

You may indeed never intend to expand but then your circumstances may also change in the future and you may want to add a room, enlarge a room, provide a separate entrance, etc. Just assure yourself, at the start, that your house will accept this. Adding a room or an area is relatively easy, if the work has been foreseen and planned. Your architect can give you the kind of floor plan and construction that will make this easy.

Whatever the situation, a good addition is one that is unnoticeable both from the outside and the inside. It easily complements the form and in the interior it has expanded the livability of the house without being forced or awkward.

How To Find Your Own Architect

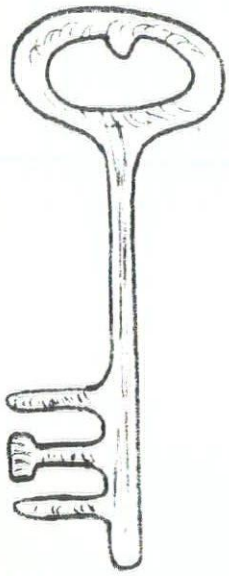
You will find an architect the same way you may have found your dentist or your accountant or your lawyer. You will find him by referral from your mother, best friend or golf partner. You may not like the first architect you talk to or you may not know anyone who knows an architect. You may indeed want to talk to a number of architects.

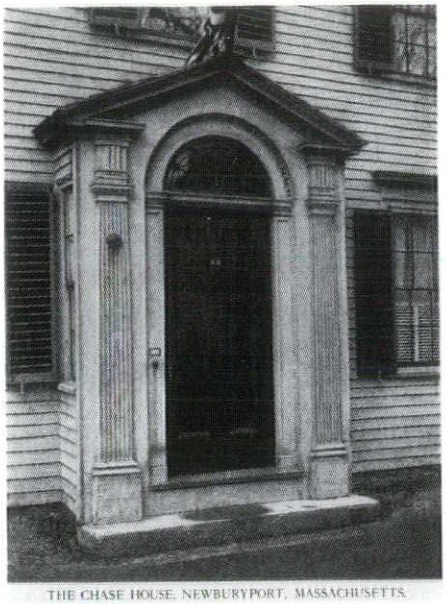
The Minnesota Society of Architects (100 Northwestern National Bank Building, Saint Paul Mn 55102, Telephone 612-227-0761) can provide you with a list of architects interested in residential work. You may make appointments to visit any of these architects. View their offices, look at photographs and at actual examples of their work.

The architect you will finally select will be the one toward whom you feel the most confidence, the one whose work excites you the most, the one whose thinking, attitude and approach you feel most attracted to. To make this house the best house you could possibly build, your architect must be allowed to challenge your views, your taste and your prejudices and for him to be the best architect for you, he will want you to challenge him, to question his assumptions and decisions.

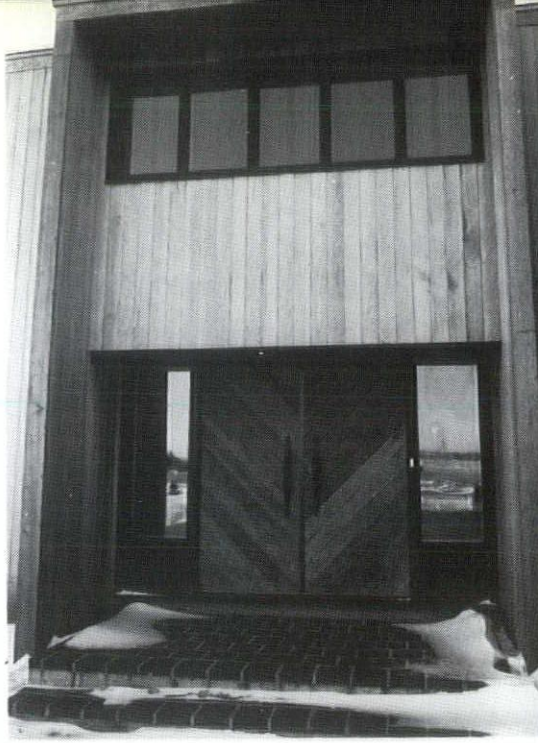
Finally, your best architect is the one with whom chemical reactions are set up, reactions which generate creative thinking, imagination, and even poetry.

The Front Door





THE CHASE HOUSE, NEWBURYPORT, MASSACHUSETTS



Wemlinger, Remely & Associates, Inc., St. Cloud

A front door is not just to face the street. A front door is to enter. Sometimes the back door is the front door. The main entrance to a house is what matters. Not the main entrance for visitors, but the main entrance for everyone. A good houseplan does not discriminate. Backdoors side doors are convenience doors.

A main door is like a big eyelid: when you lift it up, you get a sense of what's inside. You begin to feel that you are entering the protected, insulated, demanding and designed world of the inner life. The design of this main entrance, the weight of the door, the feel of the hardware, the smell of the floor combine to create that frontier between the outside world and the inside world. Treat that frontier with care and love.

Main doors and entries are for receiving. They also provide good airlocks and from an even more practical point of view, they are a good vicinity to leave overcoats and boots and canes.

Marcel Breuer, Architect

The Parlor

The parlor in your grandmother's house, whether in the city or on the farm, was more protected than the most precious exquisite Benedictine chapel ever was. This was the place no one ever entered, except to clean it. Everything was to be admired and it was admired either standing by the door or just through the lace curtains. On the occasion of an important wedding or funeral, the room was gingerly used and then just as a receiving chamber to benignly greet and smile or moan.

Today there is no need for the living room to be this up front room of olden days. The democratization of our society has enabled us to accept each other at face value without the necessity to pose for certain people or activities.

The living room is an activity center. It is the area for relaxation, for interaction, for socializing and for work. A good living room will provide for most activities and moods and will even make a family room or amusement room superfluous. Sometimes the family room actually helps create the segregation of activities and the reinforcement of the up front living room.

At times, depending on the family structure, it is necessary to create secondary activity centers. These are sometimes on a different level, adjacent to children's bedrooms or for an elderly person or for special uses.

Ralph Rapson & Associates, Architects, Minneapolis

The Kitchen

By Alexander Dekker

The kitchen refers to an area containing the storage cabinets, appliances, counters and activity space necessary to prepare and serve meals. The kitchen may be a separate room, or part of a larger room with space for dining or other family activities. The basic requirements for the successful design of the work area in the kitchen are adequate storage, appliance space, counter and activity space; all arranged for maximum efficiency and maximum opportunity for a pleasurable experience. They are traditionally grouped into three centers of activity: preservation and storage center, preparation and cleaning center and the cooking and serving center.

The success of a kitchen is dependent upon the way in which the equipment comprising these three centers is arranged with relation to the other rooms of the house and to each other. This arrangement depends upon the possible locations for doors and windows. There should be an outside door close to the preservation and storage center and a window over the sink with exposure to the east or south.

If there is a breakfast area, a window with an east or south exposure with an area for plants or herbs is always nice. There should also be access from the cooking-serving area to the dining area.

Clearances: The recommended clearance for the work area between base cabinets and appliances opposite each other is 5'-0" liberal to 4'-0" minimum. The same clearance is required from counter front to a table, a wall or to the face of a storage wall if the space is a work area. The liberal clearance allows room to walk past, the lesser clearances allow space to edge past.

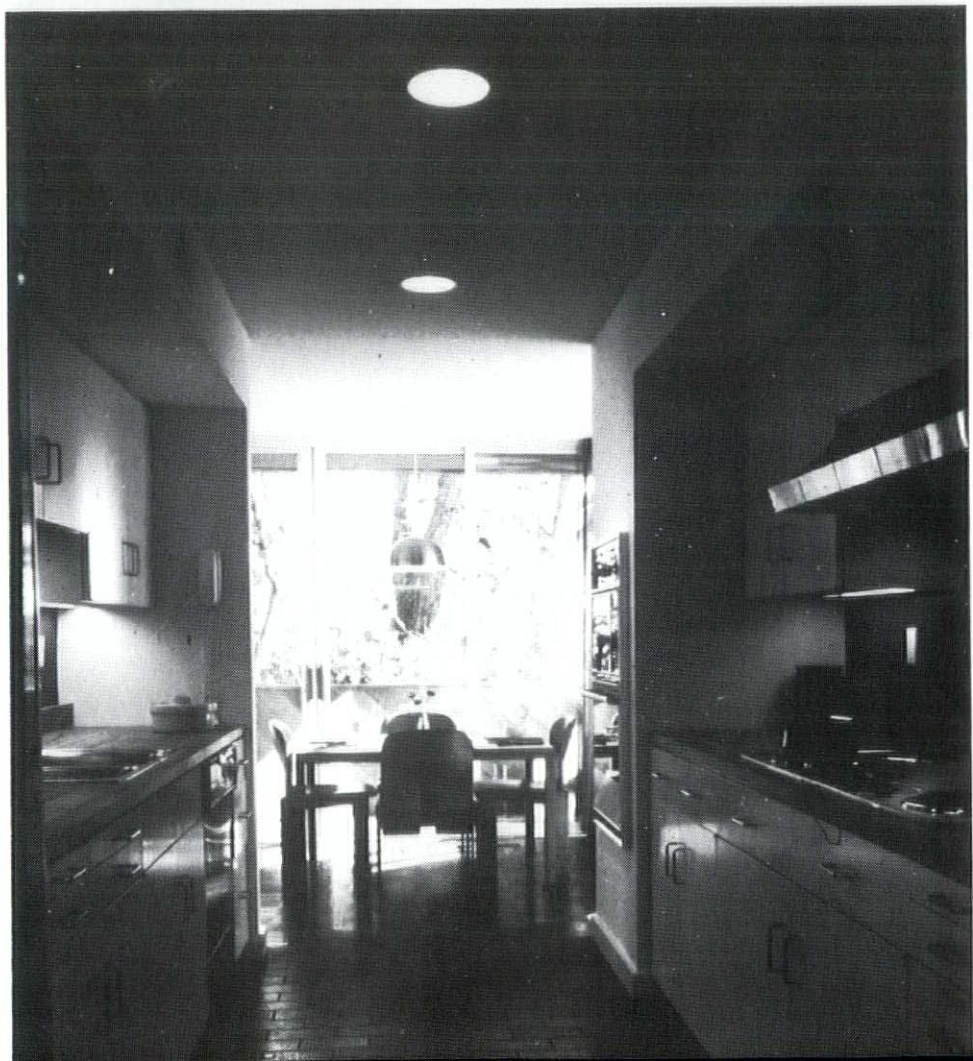
Ventilation: Good cross ventilation in the kitchen with proper ventilation above the stove is mandatory.

As in everything having to do with cooking, there is a remarkably wide lack of unanimity about the design of the kitchen. The same cultural factors which operate to confuse the cooking-dining relationship also affect the kitchen atmosphere. We are all familiar with the poles of opinion on the subject

(Continued on page 128)

Alexander Dekker, a graduate of St. Joseph and Don-Bosco Institute of Technology in Rotterdam and the Rochester (NY) Institute of Technology, is an associate professor in the Studio Arts Department (Interior Design) of the University of Minnesota. He has also been in independent practice in Minneapolis since 1971.

Ralph Rapson & Associates, Architects



D. Eric Wheeler, Architect

Dining

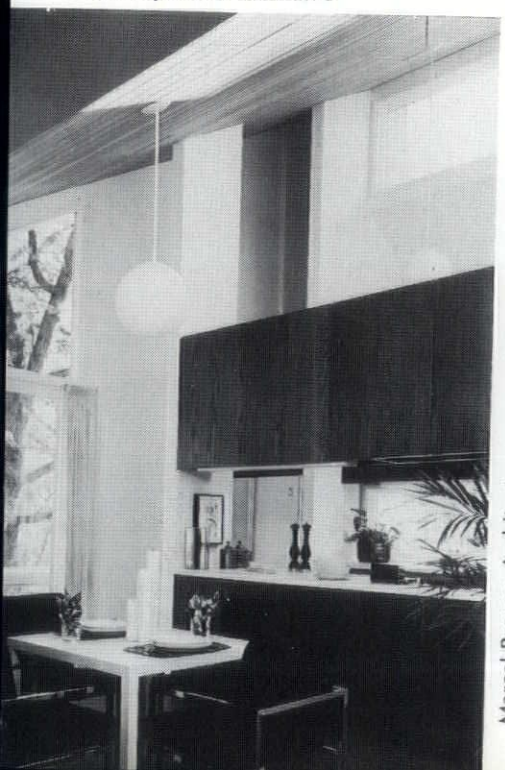
By Alexander Dekker

The word dining calls to mind festive occasions like Christmas, Easter, Thanksgiving. The menus are traditional, on a more even beat. The dinner party, of several people, with several courses, cocktails, wine — evening clothes and candle light, is probably the most ambitious, formal, and exciting occasion. These events require extra space, not only for a large number of people but service around them. Lack of interruption is another essential. The spell of such occasions should not be broken by telephone conversations or farewells and goodbyes in their midst. Audibility is of essence, though a slight din, a slight crowding is not too unpleasant.

It is in the dining room that a ritual is played out — mother and father at the head of the table and the children arranged according to age. This is the place where many a meal ends up a family conference and a proving ground of table manners. The area should be as private as the family feels; their atmosphere should suggest that degree of ritual which the family enjoys. The appointments should reflect those feelings. It should be located next to the kitchen, and have direct access to the outside so one can enjoy outdoor meals, weather permitting. ■

Team 70 Architects, Saint Paul

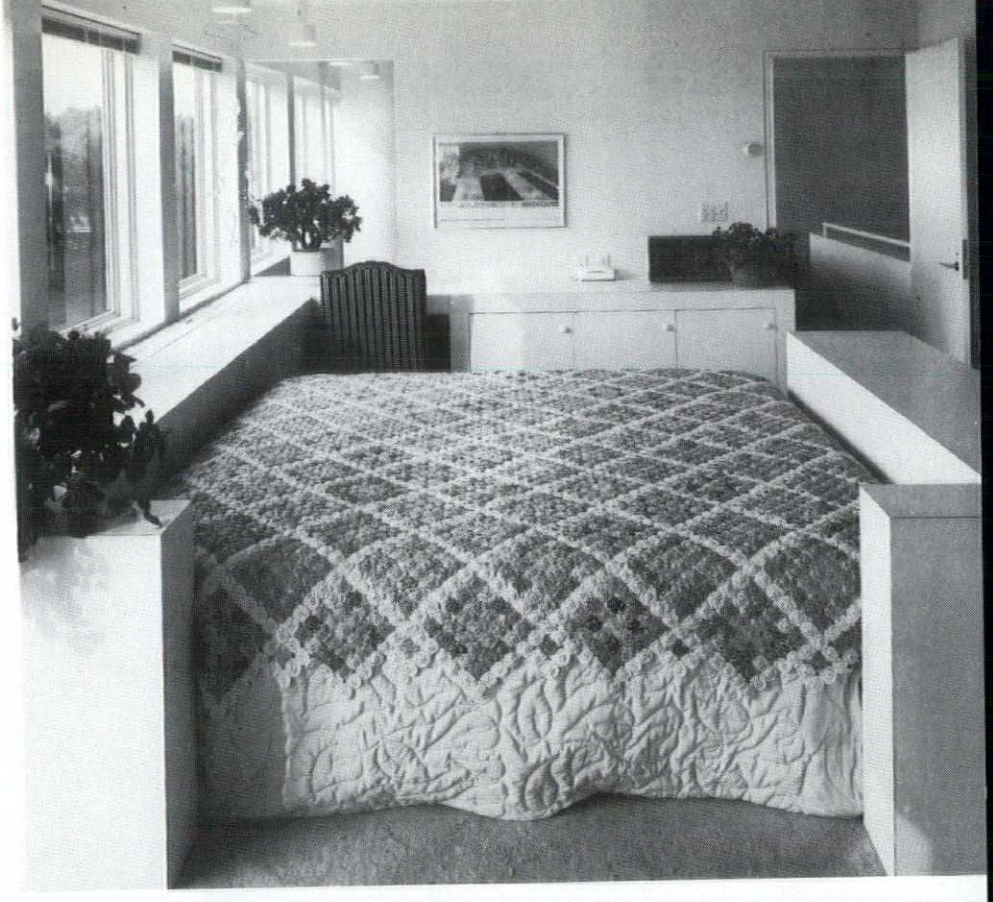
Ralph Rapson & Associates



Marcel Breuer, Architect

The Bedroom

Given the sexual emancipation and the furniture revolution, the bedroom, in its more conventional sense, is undergoing some reappraisal. At one extreme, it can simply and directly be a temple of love, with the bed representing the altar. It can also more nearly resemble a living sitting room with the sleeping function well camouflaged. In general and unless special circumstances make it necessary, it is wise to make the bedroom a flexible room that has good natural ventilation, sometime it may be necessary to recuperate from an illness or to seek privacy for study or contemplation in it. As with the rest of the house, it is difficult to think of the bedroom in a dispassionate manner, to simply assign it a function. It has many functions and one often overlaps the other, even becoming another.



The Bathroom

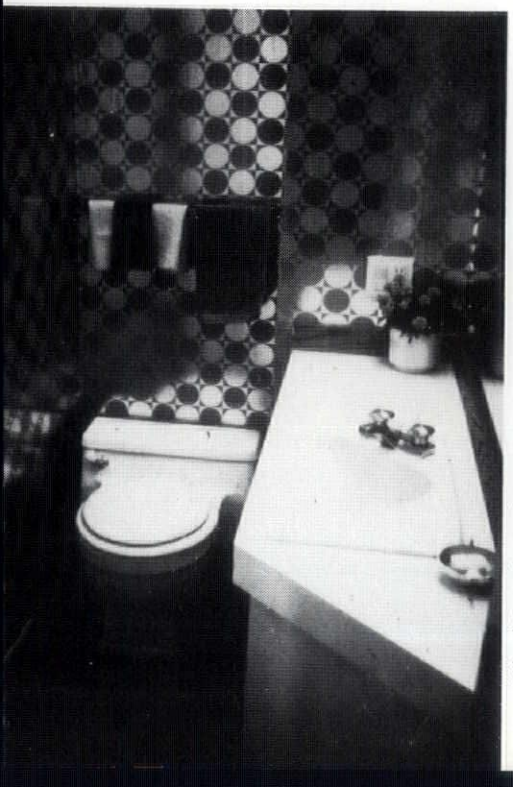
The bathroom like the kitchen is very hygienic and clean and straightforward. All the pieces are prefabricated and it is up to the architect to suggest the best arrangement and selection of fixtures.

If the budget allows for it, a custom vanity can be installed to more nearly approximate the counter height necessary for the owner. Too low a vanity can, like most small irritations, have a detrimental effect on anybody's temperament.

The bathroom oddly reflects the ambivalence of our taste and longings. The bathroom with its attendant areas (e.g. storage, dressing, etc.) is at once the most lavish and spacially sensuous room in the house. It religiously adheres to the ideal of cleanliness and yet it slips a bit in matters of strict dogma. After all, when does cleanliness stop and vanity begin? Beauty is vanity.

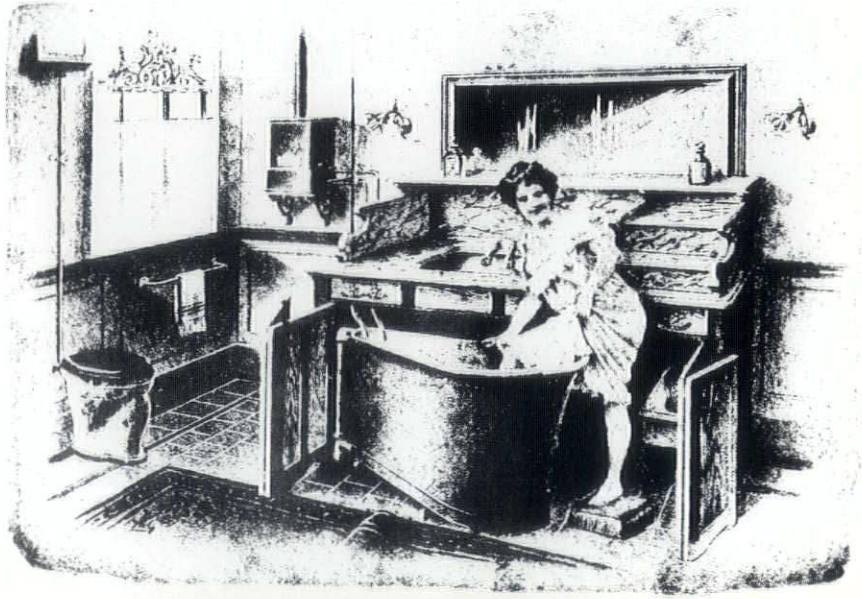
Of course bathrooms are also, as Lewis Mumford has said, the only room in which one can be truly private, perhaps the only room in which a person can cry or simply look at himself.

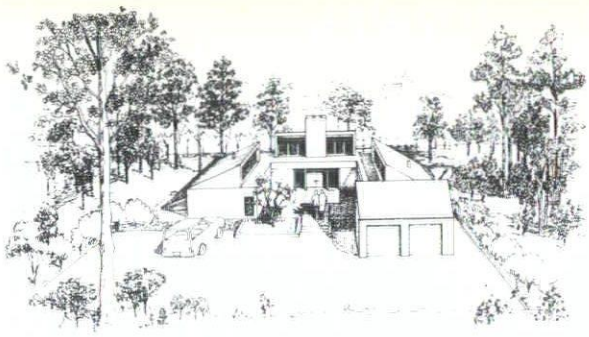
Dan Fox, Designer



Alfred French, Architect

Rousseau & cie





Residence for Mr. & Mrs. Daniel P. French

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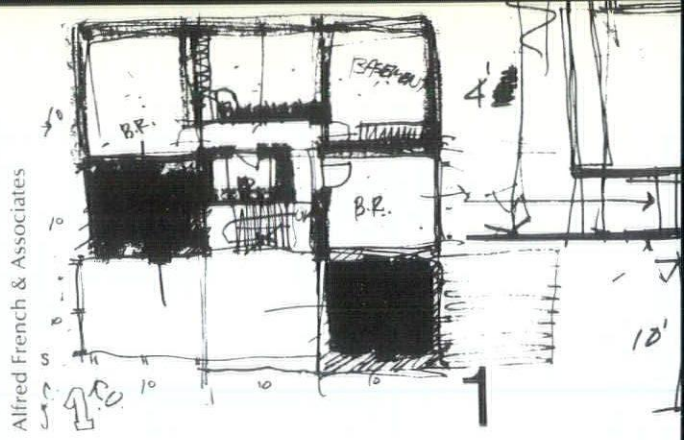


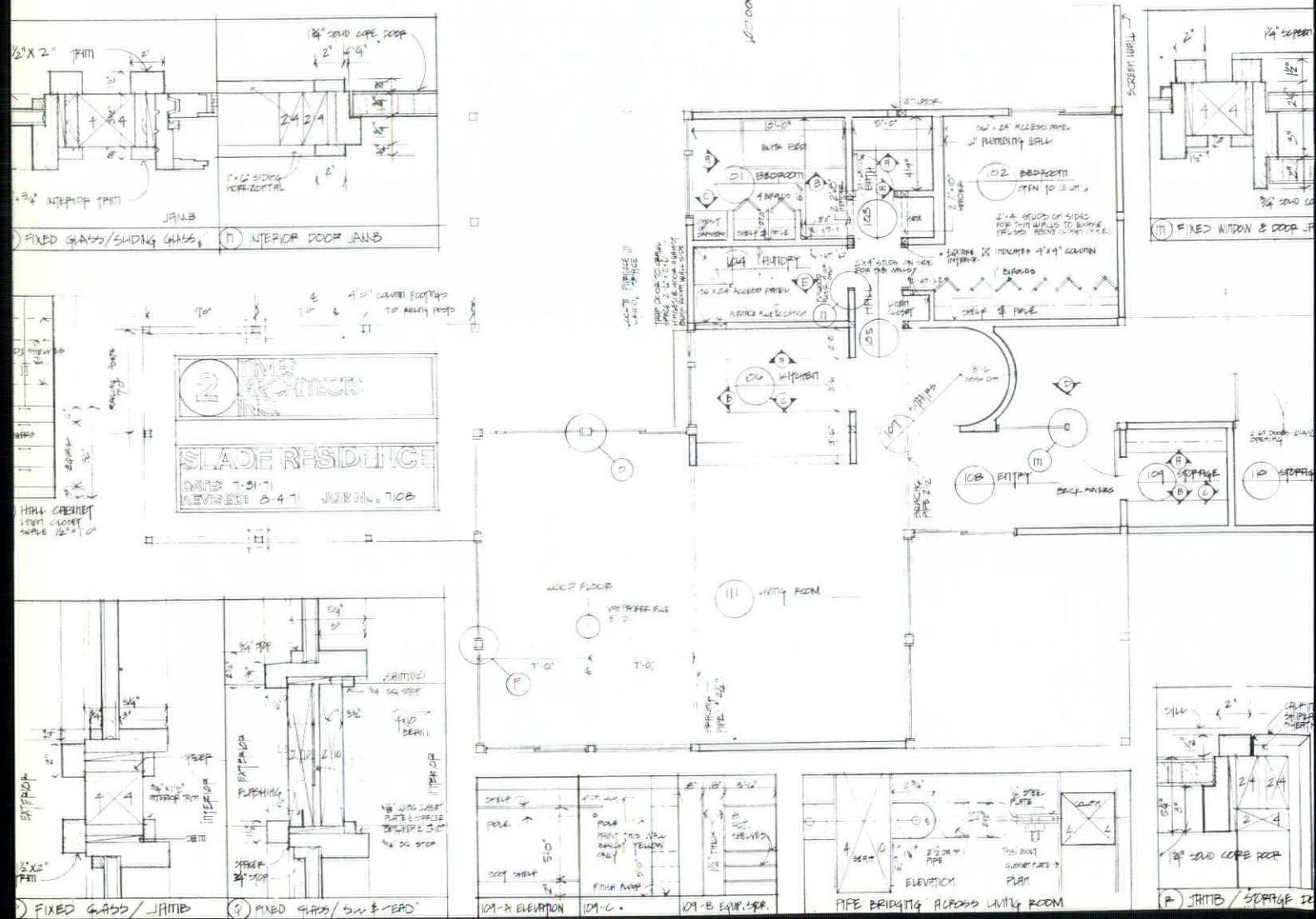
What Does an Architect Do and How

First of all, the architect you have selected becomes your friend. You will want to tell him your requirements — rational and logical. So many bedrooms, living room not too large but large enough to entertain, etc., garage and storage . . . and of course, also your budget. Then you will also tell him of your dream house. The house you know you can't afford, but if you could, you would . . . and you will tell him about houses you have lived in and about houses you have admired.

Out of all this, he will put together a *program*. His program will be rational and sober. It will show square foot allotments for different functions and indicate priorities in matters of circulation and cost. Some of the things your architect has found out by now, he cannot write down, perhaps because it's hard to verbalize. Nevertheless he has imaginatively entered your way of life and until the design of the house is settled, he is completely in your orbit.

After he has reviewed the program with you, he will begin a series of preliminary sketch plans. In these plans he will seek to illustrate the functional relationships that you have asked for as well as to synthecize your dreams and your budget on your specific site. This will give rise to a *concept*.

He will use sketches, plans, perspectives, models to illustrate his ideas and to receive your reactions. After you are both satisfied that you have arrived at the best possible design, he will begin what are normally referred to as the *construction documents*. These are the *working drawings*, fully dimensioned and annotated, and the *specifications* which spell out in detail the material selections, performance, the construction standards and methods to be followed. It is during this phase that you will get into many details such as the selection of the floor material for the bathroom, the hardware for the cabinets, the light fixtures for the entry, etc.



THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document B131

Standard Form of Agreement Between Owner and Architect

on a basis of a

PERCENTAGE OF CONSTRUCTION COST

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES. CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION

THE AMERICAN INSTITUTE OF ARCHITECTS

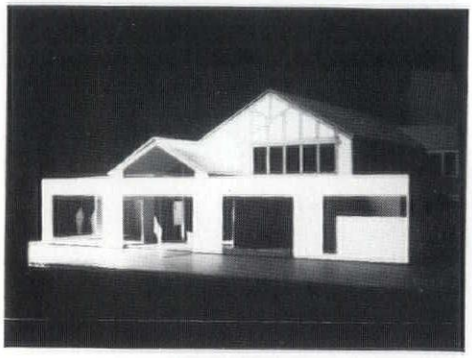
AIA Document A107

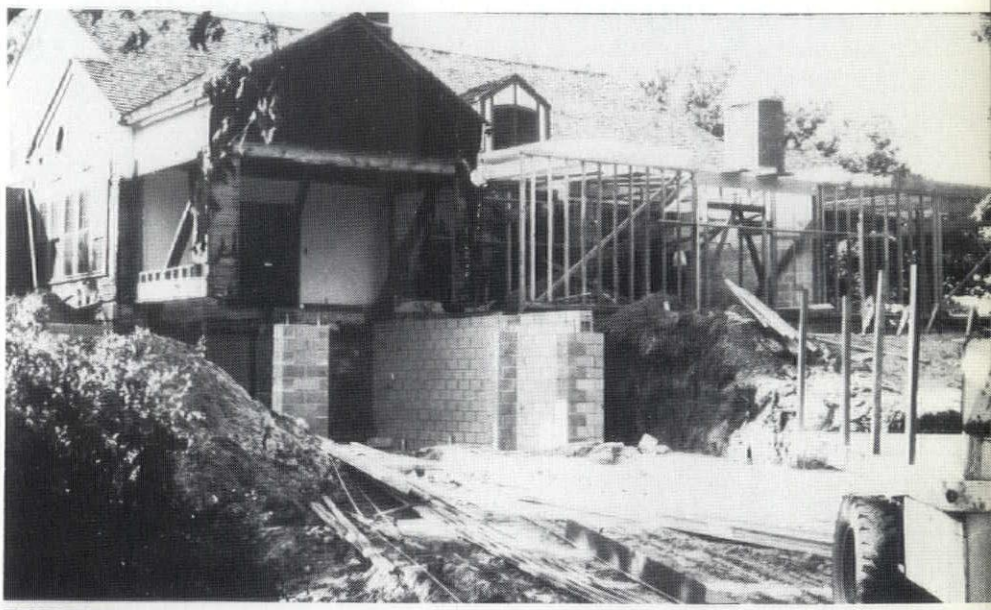
Standard Form of Agreement Between Owner and Contractor

Short Form Agreement for **Small Construction Contracts**

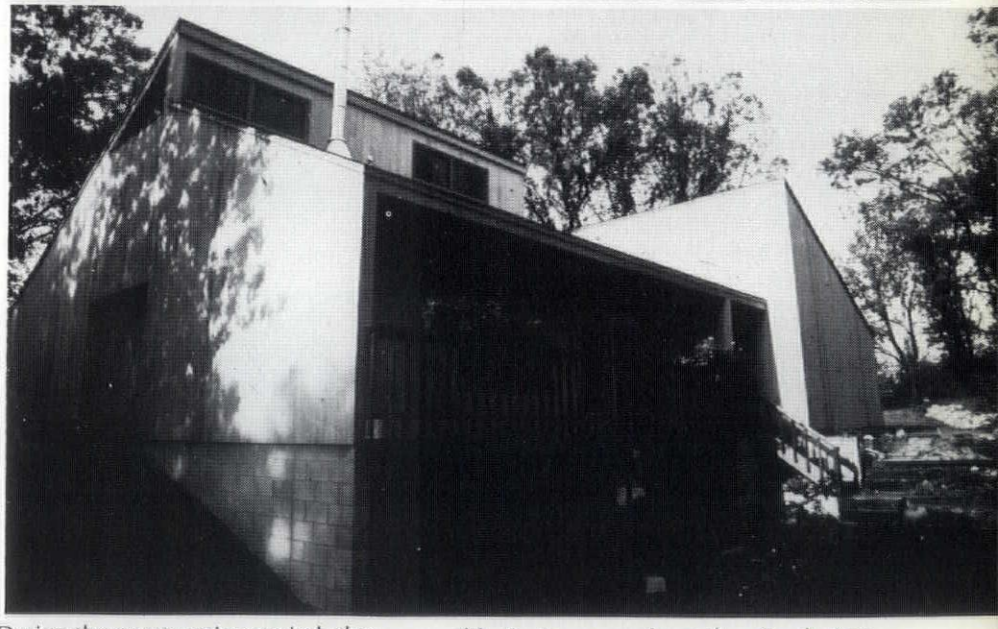
Where the Basis of Payment is a

STIPULATED SUM





Team 70, Architects



Eldon Morrison/Architects

After all these decisions have been made, have been drawn and written up, have been reviewed and approved by you, the architect will issue or *publish* the construction documents. He will ask three or four or five contractors to submit *bids,* based on these drawings and specifications. Usually he will recommend awarding the contract to the lowest bidder, unless that bidder is so low that his bid appears unreliable. The architect will then prepare a *contract* between you and the contractor which is to be signed by both parties. That contract is a standard document prepared by the American Institute of Architects and is designed to equitably protect all parties.

During the construction period, the architect will regularly visit the site, observe the construction, give whatever directions seem warranted and in general assure himself that the intent of the drawings is being carried out. When the contractor submits a request for payment, it will be verified by the architect as to its justification and forwarded to you with a recommendation for payment of either the total sum or a properly adjusted sum. Unless you are very strong indeed, you will not be able to stay away from the site during the construction period.

Throughout this period, your architect will be your guide, help you understand the sequence of construction, the infallibility of the plumbers and the magic of scale for example, what makes the foundation look so small and the frame walls so high, etc. With your architect, you will suffer the agonies and ecstacies of construction based entirely on what was at first a dream, a thought, then a plan. ■

The Older House: Possibility for Historic Restoration or Total Transformation

By Suzanne Marcoux

An old house to renovate? What does it have?

Probably, inadequate wiring and plumbing. Generally, it will have an ill-equipped kitchen facility that will have to be totally replaced. But it will have extra square feet in all the rooms. If it is worth restoring, it will have a sound structure that will last another lifetime. Often, it is worth redeeming because of beautiful natural wood or antique doors that can't be duplicated today.

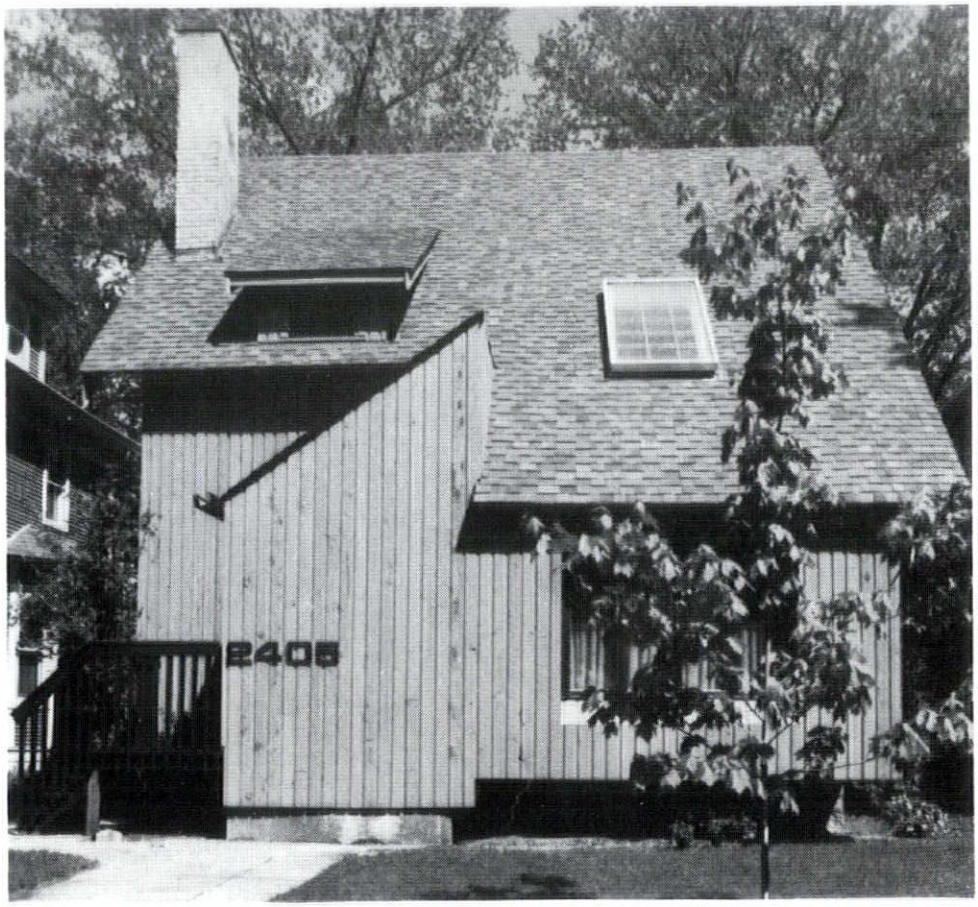
A location, a sense of historic preservation, a challenge to re-create a new space are all reasons people will tackle a renovation of an older home. Four different homes and four different renovations featured here show the diversity of such projects. Nearly all found themselves doing much of the work themselves to cut costs. But those who get caught up in renovation often feel that willingness to work will overcome any obstacle.

The Mortons claim that they had to find a home for their two Doberman Pinschers and that was how they moved out of an apartment and into the Ramsey Hill-Summit area of St. Paul. Geoff Morton had grown up in the area and felt committed to city renewal and preservation.

Their 89-year old house provides adequate space for the family of four and two dogs. There are 1600 square feet on each of the three floors and a basement. Besides the abundant amount of room, the house had four hand-carved fireplaces, natural woodwork with hand-carved cornices over doorways and a beautiful wooden stairway in the foyer. Typically, it had some of the usual drawbacks — inadequate wiring and plumbing.

The family moved in nine years ago, intending to make it their permanent home and began a gradual renovation. Geoff Morton redid the plumbing and wiring as he went from room to room. The kitchen was renovated for convenience. They put oak parkay flooring throughout the entire first floor. They redecorated the master bedroom and rebuilt the upstairs baths. The third floor became a paneled playroom for the children. Outside they built a redwood deck and landscaped.

The last unclaimed space was an old cellar which had to be entered from the outside of the house. The Mortons consulted architect, James Wengler, to create a romantic, get-away-from-it-all space. A maze of pipes and the remaining 500 square feet of the cellar were



Architect Tom Obermeyer's contemporary home was converted from a Midwest traditionally styled home.

Suzanne Marcoux, licensed in real estate, is a free lance writer from Minneapolis with a special interest in renovated and restored buildings.

converted into a Japanese bath and sauna. The sauna is a small-sized pool of 3 by 4 feet. Wengler worked out a space of what he terms lighting and texture. The brick walls, the carpeting, the cedarwood create a startling exotic metamorphosis from the rest of the house. A spiral staircase will go up through the house to connect this last unusual space to the rest of the house.

Beth Obermeyer jokes that she gets nervous if anyone is late for an appointment in her home because in the extra 15 minutes her husband has, he might knock out another wall and start a new project. Obermeyer has totally redesigned the traditional house into a contemporary-style home.

Five years ago, Tom Obermeyer sought a home that had adaptable spaces. By Lake of the Isles he found the house and began knocking out walls to create a totally new design.

Obermeyer built on two additions, both 20 by 8 feet, on the front and back of the house. The front cantilevers out, creating light and spaciousness in the living-room. Directly above is the master bedroom with an added skylite. The front addition created a sculpted-look roof which juts out at a near 45° degree angle. It totally changed the exterior appearance to a modern design.

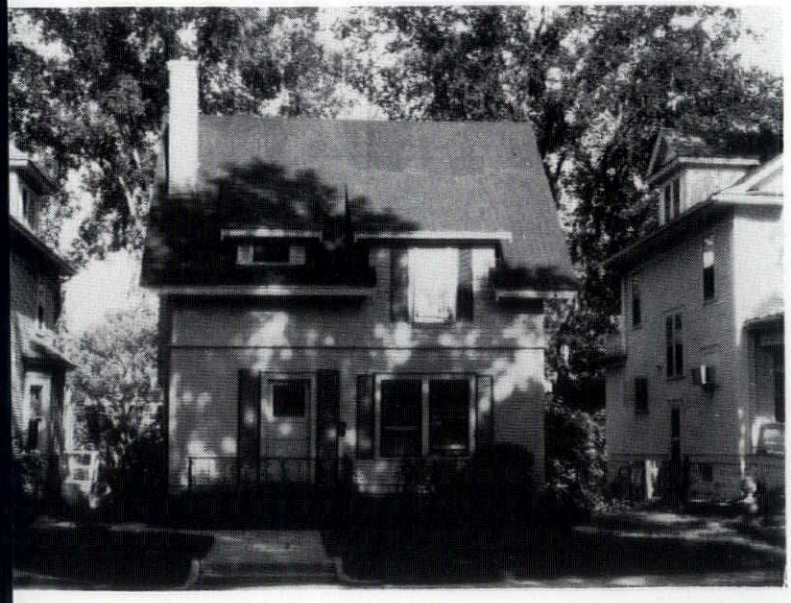
An old second floor sun porch was torn out at the back of the house to make an area with a sunken conversation area and a wall of windows extends up a 16-foot ceiling. A spiral staircase winds up to the dining-room.

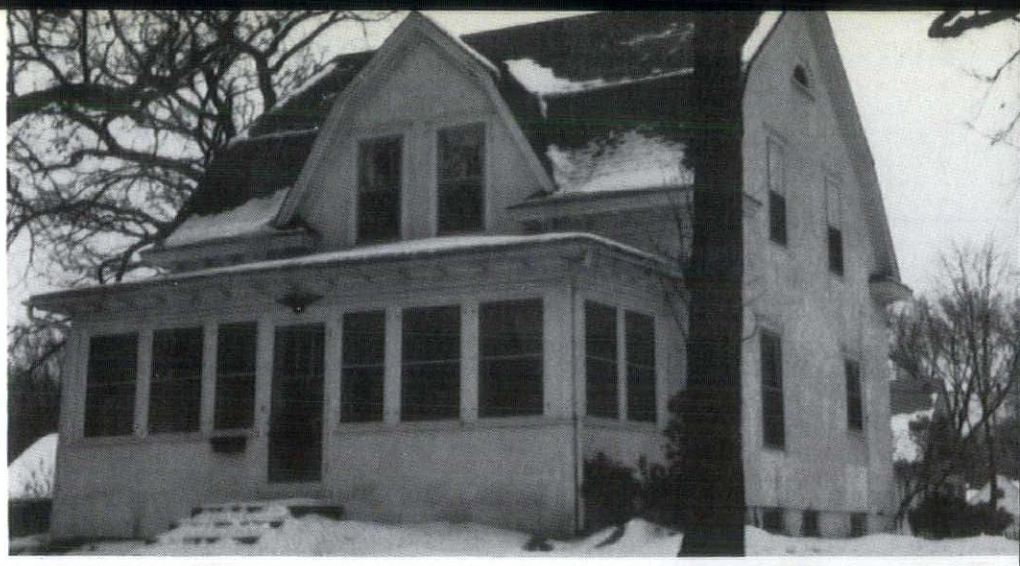
In the process of change, Tom Obermeyer learned the necessary trades by rote to save expenses. He feels that willingness to work and ingenuity can solve most of the problems. He replumbed the kitchen and built the kitchen cupboards himself. He completely replaced the bathroom fixtures and finished it off in redwood siding. Rather than buy a ready-made spiral staircase, he built his own. He designed the contemporary light fixture in the dining-room and built the buffet by salvaging old wood from the original buffet. He cut the oak into 5-inch strips and flipped it to the other side.

When Obermeyer discovered that the old house had no insulation in the walls, he solved it by putting insulation board on the outside and then the vertical cedar siding over that. At that point, he decided to change over the old double-hung windows to new casement windows.

The Obermeyers felt that their house transformation was complete when a babysitter asked if the old house had been torn down! For the Obermeyers, it was a way to design a house as they lived in it. A low estimate for construction materials totals more than $7,000. But Tom Obermeyer saved nearly all the expensive labor costs by doing things himself. He feels that for those who like the challenge and can do the work, the older home provides the possibilities for custom-designing as you live in it.

The transformation from the grey and white frame house was complete in a few months.





An addition to this home provided the needed living space and yet retained the traditional character of it.

When a Minneapolis family felt they had outgrown their older city home, they began looking at other houses for sale. Each time they returned to their home, however, they rediscovered their beautiful view of the city lake. The basic 100-year old home also had several features they loved. It included a large, formal dining room and large bedrooms. Newer homes could not provide the extra square footage and the beautiful unpainted oak woodwork.

Since they had a large majestic lot overlooking the lake and had bought the home 10 years ago, they decided on an addition. When Paul and Georgia (surnames withheld by request) got the first cost estimates of an addition, the high prices sent them back out house-hunting again.

Prices vary per contractor and various materials. But every 6-month delay in building means a higher price per square foot.

The soundness of their existing house and their large and beautiful lot finally won out. When they found an architect they had confidence in, they realized that an addition would give them the extra space and convenience.

The primary concern in design for Architect Tom Obermeyer was that the addition not look like an addition. There was an existing gambrel roof so a dual one was built on the front of the house. A new exterior of veneer brick and a brick wall around a column porch tied the old and new together. In the existing house only the original door was changed to a larger picture window. The new addition had a massive oak door that Georgia had salvaged from an older home being torn down. (Neighbors claim she built the house around the door.)

The added structure provided 600 square feet for a new living room and 200 for an upstairs den and hallway. The existing living room became a family room with the large formal dining room connecting the two.

Georgia had very firm ideas and her interest in antiques dictated a very traditional look. The living room addition has a 12 foot ceiling with an overhang den which blends easily into the large spaces of the existing house. A newer home could simply not provide the lake view and historic character of this family's home.

As a young graduate student with a family, Darrel LeBarron wanted a house in the University area and within the restrictions of a grad student budget. Unique renovation and financial bargaining resolved his housing situation.

The house the LeBarron's found was an older, structurally sound home. LeBarron stresses that it was not an architecturally interesting house when he bought it, nor was it his intention to transform it, but merely to recycle it for 30 or more years.

What did attract architect Darrel LeBarron was the natural woodwork with beamed ceilings and two large seven and one-half foot doors with oval glass centers. The house did have the drawbacks of older houses — inadequate lighting and plumbing. For three years, they made no changes. Then they decided the renovation must be done with a total plan in mind from the start.

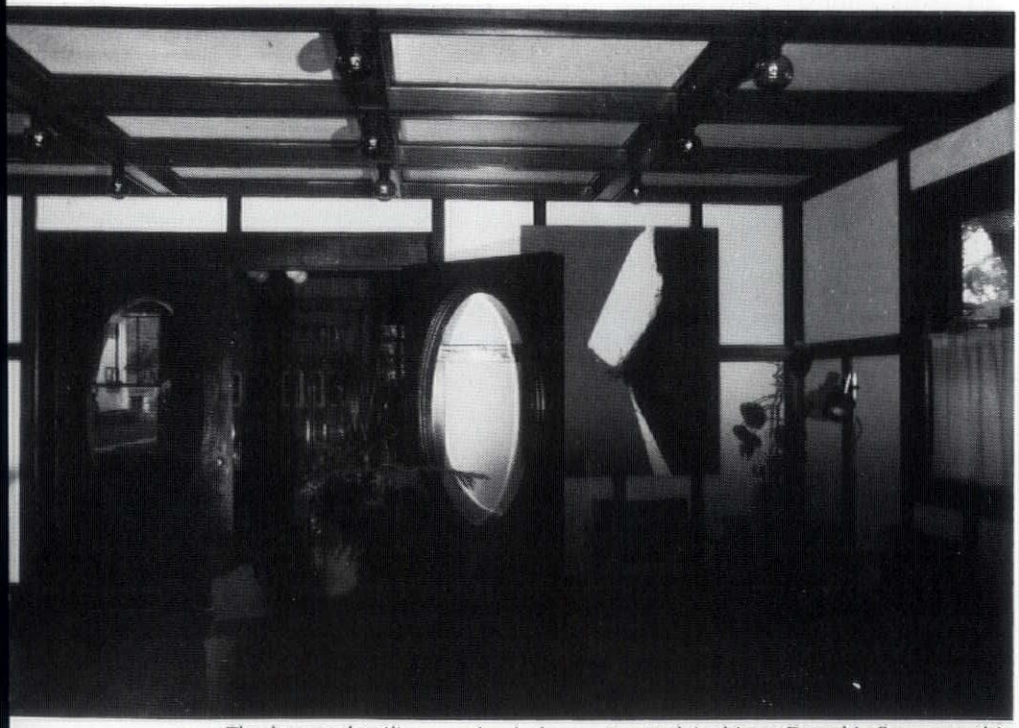
First, LeBarron called in an appraiser and the property was valued at $17,500. Then he planned the new wiring and plumbing, exterior finish and outside landscaping. He needed approximately $6,000 to make the needed changes.

LeBarron then resold the two-bedroom house to himself for $26,000. Another bank agreed to give him the new and higher mortgage when and if the proposed improvements were completed in a four-month period. LeBarron then secured a short-term loan for the $6,000 from a third bank where they had their checking account. It was paid off upon completion of work and the closing of the second mortgage. So essentially, he had no new capital outlay and his monthly payment remained phenomenally low. Yet, now the house was comparable to a new, convenient townhouse.

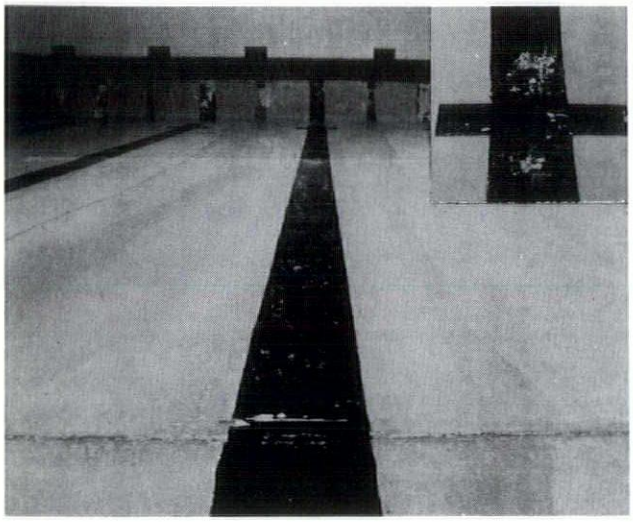
First, the new copper plumbing was completed so that the kitchen could be modernized. Almost simultaneously the projects began: the sliding door opened to a new redwood deck, a fireplace was built into the living-room and the inside walls were covered with an easy-care vinyl; the bathroom was completely redone, the exterior was stained and the yard was landscaped.

Minor cosmetic items still needed finishing touches, but the major projects were completely within the four-month span. The basic grey and white frame house had been transformed into a contemporary living space.

Most important was the final step in the Prospect Park house renovation — their taxes were raised only $1.00 a month after the house had been completely modernized. LeBarron brought the tax assessor through the house and pointed out the improvements. Since higher taxes are primarily assessed on adding extra square feet, no larger levy was in order. No additional square feet were created — just every inch made convenient and usable for today's living. They could not be taxed for better utilizing their existing space. ■



The beamed ceilings and oak doors attracted Architect Darrel LeBarron to this older house which he renovated.



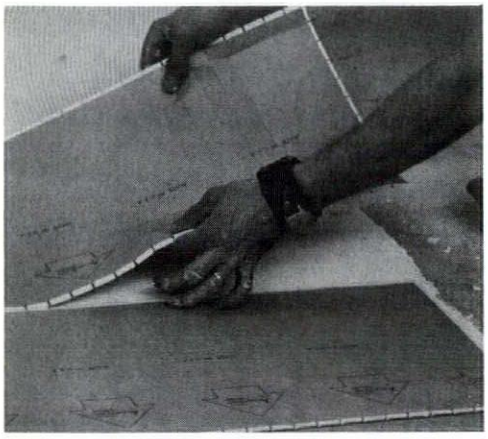
Before – pool surface is cracking and peeling (see inset). Pool needs daily cleaning and filtering system maintenance once a week.

CERAMIC TILE ELIMINATES HIGH COSTS OF SWIMMING POOL MAINTENANCE.

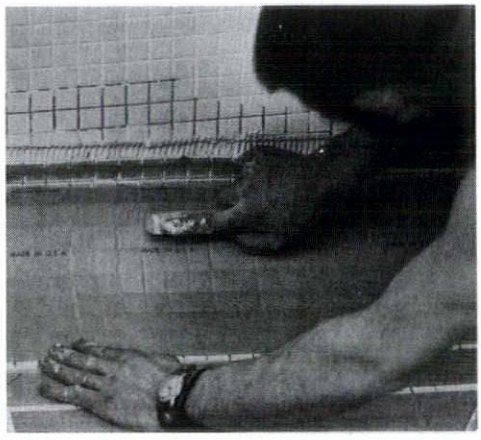
That's what officials at Park Senior High School, Cottage Grove, Minnesota, concluded when they totaled the cost of maintaining their painted pool from 1966 to 1972.

The maintenance and contracted work included sandblasting, painting, cleaning paint chips from the filtering system, daily pool cleaning, etc.

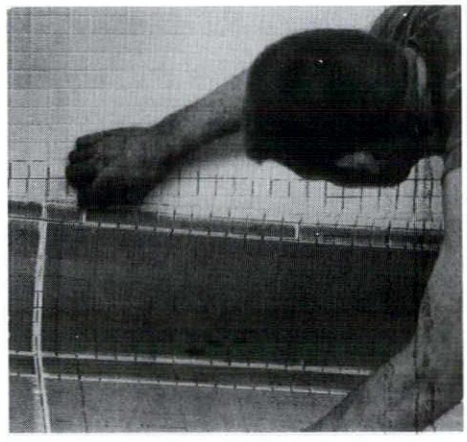
Officials decided to cut costs with Ceramic Tile early this spring. Now with work completed, they have a beautiful pool that will last indefinitely – *with minimum maintenance.*



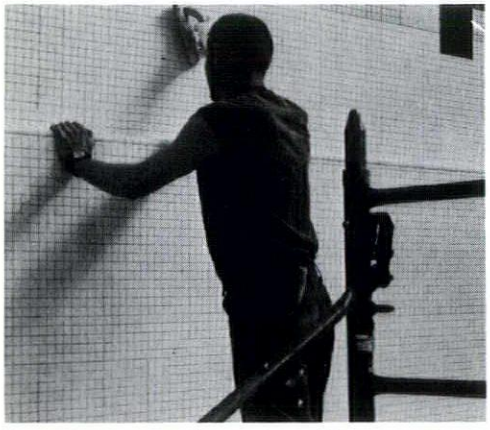
After sandblasting paint and cleaning surface, Ceramic Tiling begins.



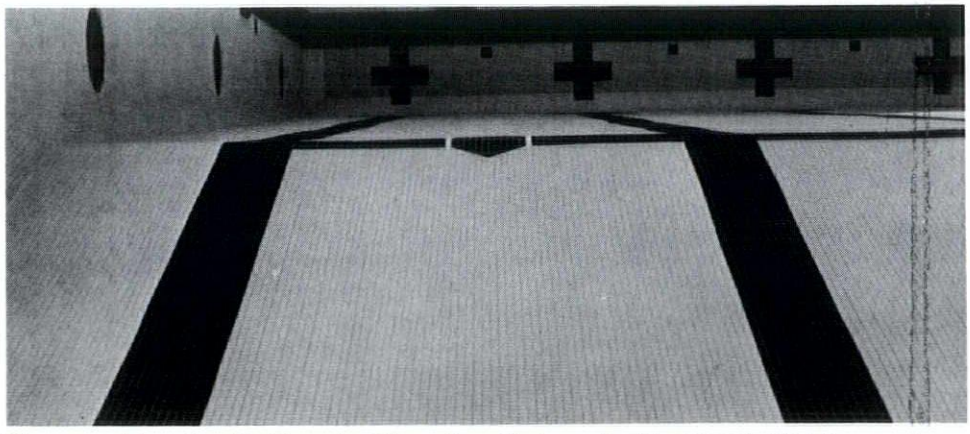
Guildset Craftsman beats Tile into setting bed for permanent installation.



Guildset Craftsman installs individual mitered Tiles for uniform finish.



Grouting completes installation of trouble-free Ceramic Tile.



After – pool has durable Ceramic Tile surface that won't chip or peel. Maintenance costs are cut and pool will look new for years.

Matson & Wegleitner Architects, Inc.

Guildset TILING

OLD AS HISTORY – MODERN AS TOMORROW

MINNESOTA CERAMIC TILE INDUSTRY

if the Sky is not the limit . . .

BUT SOME FIGURE CONSIDERABLY LOWER IS

. . . then letting separate bids for Mechanical, Electrical and General construction can help.

Separate competitive bidding reduces total construction costs by a significant amount. Because bidding is opened to all qualified contractors, the middleman is eliminated.

The contracts are awarded to reputable mechanical contracting firms who assure technical knowledge, experience, and quality workmanship at a bid price.

The results are better efficiency for architects and engineers, proven economy for clients.

Separate contracts, with all their built-in advantages, help solve money problems in a world where the sky is no longer the limit.

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OF MINNEAPOLIS AND ST. PAUL

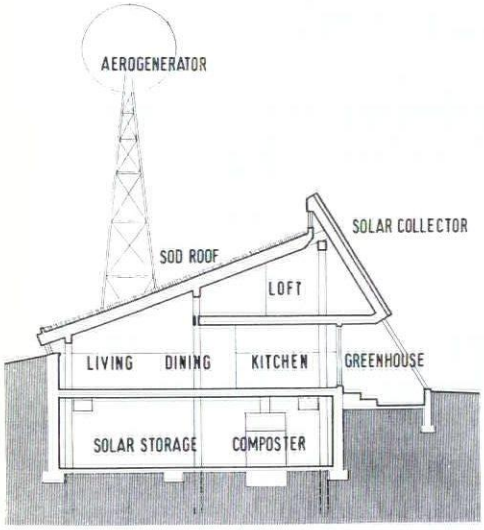
Three Solar Houses In Experimental Stages

By Eldon Morrison

The energy crisis has caused a new look into the possibility of Solar Energy for residential use.

Three of the many current experiments with solar energy in homes are those of the University of Minnesota, Iowa State University, and the University of Delaware. All three experiments are resulting in an actual prototype being built and being monitored for effectivness.

Through the Minnesota Society of Architects' Energy Task Force, literature and workshop, architects are continually apprised as to the latest developments and techniques of energy conservation. The siting of a house, the construction materials, the plan, the amount of glass are all elements which have long been essential in the planning of a sensitive and economical house.



The University of Minnesota project, Ouroboros, was featured in the September-October issue of the Northwest Architect. It is the project of 150 students in the Environmental Design Class of the School of Architecture and Landscape Architecture. The full scale working model nearly completed at the University Research Station near Rosemount includes a number of features, each contributing toward the unique composite — a solar energized house.

The plan shape is a trapezoid with the longest side to the south thus absorbing a maximum of solar energy. This is done by a 700 sq. ft. 'Thomason' flat plate solar collector. This collector, in simple description, is two sheets of glass over a sheet of corrugated galvanized steel into which water is dripping. As the water washes down the metal pan, heat is absorbed, raising the temperature 20° F. The water is then drained into basement storage tanks which are surrounded by crushed rock. Air pulled through the rock by a conventional forced air system is heated by radiation and then supplied to the rooms above.

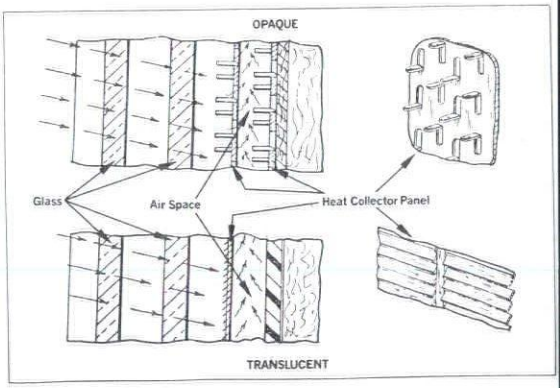
A wind driven propeller generator being built next to the house is expected to produce all of the electric power required.

Physical innovations include a sod roof for insulation in the winter and cooling in the summer and a greenhouse to raise some food for the inhabitants.

The earth from the basement excavation is pushed back against the north, west, and east walls to help reduce exposure.

The bathroom is the only totally enclosed room in the house. It includes a mist shower (to conserve water), a Japanese style bath tub, and a composting toilet that uses bacteria to break wastes down into fertilizer for use in gardens and the greenhouse.

According to Dennis Holloway, Assistant Professor of Architecture at the University of Minnesota, this model is only the start of a broad program to conserve energy. Future phases of Project Ouroboros will center on existing inner urban dwellings in St. Paul and Minneapolis, where they will investigate the extent to which typical existing houses can be energy-conserving and self sufficient, with all cost factors considered.



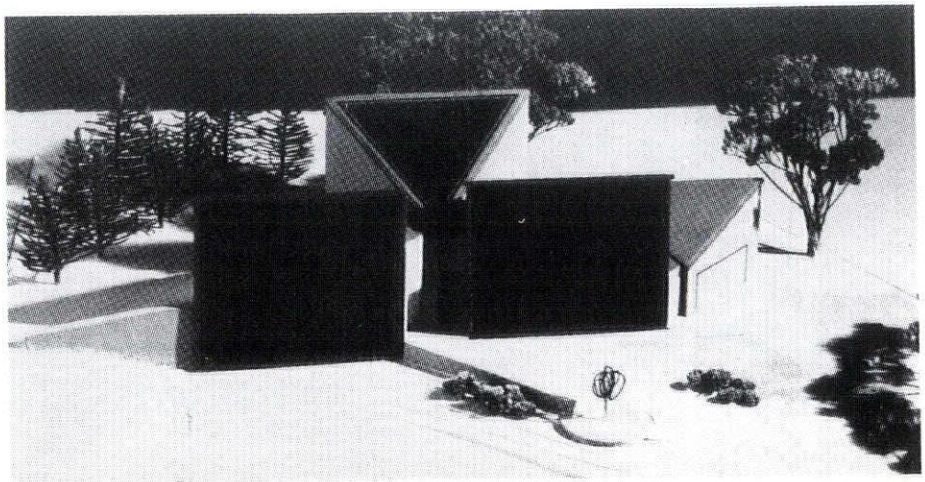
The Iowa State University solar home is being designed by the architectural firm of Hansen-Lind-Meyer, Iowa City, Iowa. It is being built for John McLaughlin, president of Mid-American Industries, near Mead, Nebraska. The home utilizes specially designed solar heat collection panels created by Jim Schoenfelder, an employee of the architectural firm. Schoenfelder's unique panels were the subject of graduate level research he did at Iowa State for his master's thesis in architecture. Because his work was done as part of the University's research program, the ISU Research Foundation is involved in protecting patent rights on the device.

Two large rectangular solar heat collection panels on the south side of the house, during sunny hours, warm the air which is circulated behind them. The warmed air is forced from the collectors to a storage room in the basement level of the home where the heat is "saved up" until it is needed.

The hot air collectors contain both semi-transparent and perforated plates. The semi-transparent design allows visibility through the collector and allows light to enter the home while siphoning off heat for storage and use as required. The perforated design, which is opaque and cuts out light, is more efficient.

The storage area is a room housing five gallon containers filled with "Glauber's salt". The salt holds the sun's heat until chilly temperatures require that it be distributed through the house by a conventional forced air system.

The designers estimate that sufficient heat can be stored to adequately



Eldon Morrison, a graduate of Iowa State University, is president of Eldon Morrison Architects, Inc., White Bear Lake.

warm the home for ten consecutive sunless days. If necessary, a "heat pump" can be used to reduce the temperature of the storage room from its normal 90° down to about 40° F. The architects say the situation should seldom, if ever, require more heat but, just in case, a "backup" electric heating element has been incorporated in the design.

The ingenious "heat pump" is important in the proper heating and cooling of the home. It operates much like a "reversible" air conditioner. An air conditioner forces hot air outside and forces cool air inside. The heat pump, equipped with a two-way valve, can be reversed, thus keeping hot air in and forcing cool air out.

In this way, solar energy can be employed both to heat and cool the home. As the cooling season nears its end, the warm air expelled by the heat pump can be directed to the storage room, thus "stock-piling" warmth for the cold weather to come.

Several design considerations are evident in the model solar home. For example, no wall faces directly east or west, thus reducing the cooling load which would be caused by intense summer sun. The northeast wall, on the lower level, is shaded and insulated by an adjoining double garage. The northwest corner of the site is planted with evergreens which act as a windbreak and the northwest wall of the house is shaded and insulated by an earthen berm.

Window area has been kept to a minimum and roofs not used as collectors are sloped away from the sun to reduce the summer cooling load.

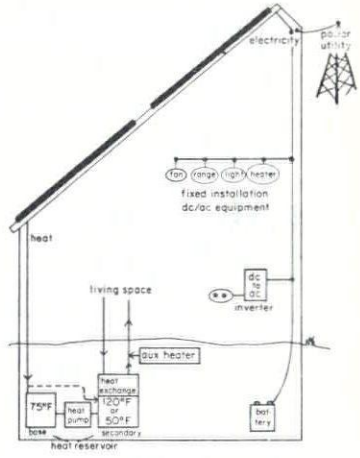
The home is made up of triangular, nearly pyramidal, modules joined by rectangular connectors. The pyramidal configuration allows large collector areas and limited enclosed air space to be heated or cooled. This system also permits flexibility in floor plan and site orientation and offers the possibility of factory-constructed modular elements which could be trucked to building sites and joined there.

The home now under construction will be expensive, say its designers, because each component unique to a solar heating and cooling system must be specially manufactured. If the home is the success its architects trust it will be, mass production of such elements could be expected to reduce the total cost of similar homes constructed in the future.

The Institute of Energy Conservation of the University of Delaware has built Solar One, the first house to convert sunlight into electricity and heat.

Solar One is a systemized house which converts sunlight directly into heat and electric power. When light strikes the solar panels on the roof, DC electricity is generated by the Cadmium Sulfide (CdS) Solar Cells. In addition, the sunlight heats these solar cells. Air is forced through the solar collectors and is heated by contacting the back of the hot solar cells. Additional black surface panels are provided to boost the heat further.

Ductwork conducts the hot air through a storage system containing eutectic salts. As the air passes over the eutectic salt, heat is transferred to the



salt and causes it to melt at 120° F. absorbing a large amount of heat known as "Heat of Fusion." In this way heat can be stored in a much smaller volume (6 ft. x 6 ft. x 6 ft.) than in heated rocks or water. During the evening and night hours when the house cools down, its air is circulated through the eutectic salt containers and now "extracts" this heat of fusion from the salt. The process starts over again when the sun begins to shine. When there is not enough sunshine to heat the house to comfortable temperatures, a heat pump is used to amplify the heat. In this way, solar energy can be utilized for house heating even during cloudy winter days.

During the summer, the heat pump is used as an air conditoner and will operate predominantly during night hours to freeze another eutectic salt. During day hours house air is circulated through these eutectic salt containers, extracting "coolness" from the salt and cooling the rooms. Night hours are used to freeze the salt since it is easier to cool during night time and more electricity is also available from power utilities.

The use of Cadmium Sulfide Solar Cells and the generation of electricity as well as heat is what distinguishes Solar One from other solar structures that have been built in the past. Wiring conducts the electricity from the CdS cells to household units such as an electric range, heaters, lights, etc. Any excess electricity that cannot be immediately used is stored in a series of batteries. The stored energy will be used especially during the hours when electricity is high in demand (afternoon hours) and will help to alleviate power shortages for power utilities.

Solar One is unique in its architecture. The artist's conception shows it to have a high, interesting, 45° roofline, designed for exposure to maximum sunlight. The house has a living room — dining room, two bedrooms and a kitchen as well as a garage and full basement. The upper level currently is devoted to experimental equipment but will be converted into two additional bedrooms in the future.

The roof contains a skylight which is designed to protect the solar collectors during the experimental period. Below the skylight the solar cell panels and heat collectors are located. The front of the house also contains six solar heat collectors for additional heating during cold winter days. All collectors have plexiglass front coverings.

Solar One has been built with contributions from the University of Delaware and the Delmarva Power and Light Company. It was designed by Harry Weese Associates with assistance by Cosentini Associates and the Institute of Energy Conversion. ■

The Kitchen
(Contined from page 114)

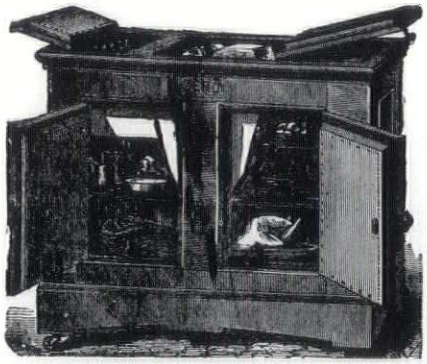
of "the farm versus the laboratory kitchen." Both ideas seem somewhat false in that the kitchen for the typical urban/suburban single-family house has nothing to do with either farms or laboratories.

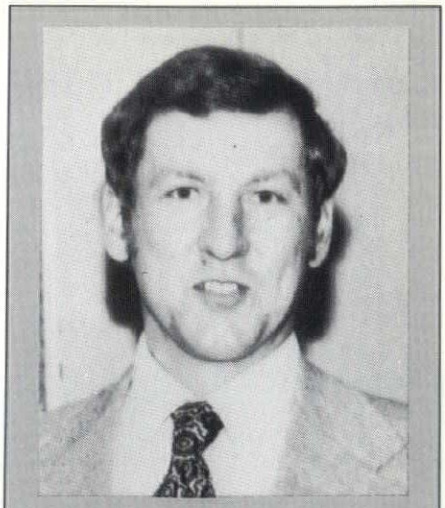
The real argument is perhaps between the warm and the cold kitchen. The cold, or stock kitchen, is undoubtedly a reflection of the same complete lack of humanity which characterizes most of our industrial design. The farm kitchen, on the other hand , is a sentimentalist's. Mixtures of the two, such as the combination of natural wood and the snow-white utilitarian ice box, usually leave something to be desired. There is a fair range of colors available in kitchen fixtures and kitchen cabinets, flooring, and wall coverings, however, which give the architect freedom from some of the restrictions put upon him by stock equipment.

This leaves us still with the true character of the kitchen in doubt. Laboratory kitchens convey a message that says in effect that the business of cooking is time consuming and boring and should be accomplished with a minimum of emotion. It demeans the art. In so doing, it demeans the person doing the cooking, who becomes an almost mechanical object rather than the sorcerer or sorceress of the steaming pot.

The farm kitchen is simply a stage set, an artificial make-believe world. Here one play-acts the role of cook. Neither atmosphere suggests the solid dignity of an important work function,

the magic in cooking nor the delights of its products. The problem should be approached from the point of view of the essential character of the various work units. Each part of the kitchen contains, *latent* in it, very strong and evocative connotations: For the storage area we have tea from India, spices from the Orient, wine from France or Spain, cheeses from Holland, etc. The sink, on the other hand, is homey and down to earth. How could one exist without it? It is used for about every process having to do with eating: let alone for garbage; washing things as hands and children; watering flowers; making drinks etc. Who can resist the smell of a dinner cooking on the range or a pie baking in the oven? Who can find disagreement among a group of people when it is time to eat? The inherent beauty and formality of china and silver needs only to be brought out in order to give the kitchen the richest and realest of atmospheres. ■





profile

Since 1906 the H & H Robertson Company has grown to become a well known, worldwide supplier-manufacturer of steel products used in all types of building construction.

In working with architects, Don Ponto, branch manager for the Robertson Company, has for seven years provided answers to highly technical questions concerning building construction locally. He works with four basic categories: walls, floors, roofs and ventilation systems. With an engineering background, Ponto is capable of providing design information, recommendations, research and general information to the architect on a highly technical scale. Sometimes, if a specific question cannot be answered, he contacts one of many plant divisions where research and development technicians are highly trained to provide answers in a short time.

Recently Ponto has worked with architects in designing and selecting special insulated walls, floor raceways for wiring, acoustical control in the walls and ceilings and general heat dispersion in the commercial and industrial construction market.

"In working on a project today, it is my opinion that it requires more input, involvement and general closeness on the part of an individual. I call it the 'fast track approach.'

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5-year Course	5	*4	9
4-year Course	4	*5	9
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5-year Course	5	*5	10
4-year Course	4	*6	10
Non-School Trained Applicant	0	13	13

Professional experience is defined as equivalent to satisfactory diversified general practice experience under the supervision of registered Architects.
*Professional experience must be acquired after graduation except that continuous experience gained before graduation will be evaluated by the Board. An applicant with qualified experience will be granted one-half year credit for each full year of experience, not to exceed a total of one (1) year. The remaining experience shall be after graduation. No credit will be given to architectural students for experience gained during summer vacations.
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Something to Keep Out The Big Bad Wolf: The House, Its Theory and Construction

By Carole E. King

Any person interested in having a house designed and built specifically for himself must recognize this: the client is ultimately responsible for the creation of his own house. The architect can design the structure; the builder can assemble it; but only the client knows intimately his own personal tastes, desires, intuitions, and idiosyncracies. Even a sincere and sensitive architect will be able to provide an entirely satisfactory home only if his client is willing and able to express thoroughly considered needs.

Among the books which might prepare the prospective client to assume this responsibility, two excel: *The House and the Art of its Design* by Robert Woods Kennedy and *Your Engineered House* by Rex Roberts. Kennedy's ingenious book, which covers such diverse topics as the items that will need kitchen shelf space and the relationship between architect and client, is one of the most comprehensive but readable volumes available. Kennedy begins by defining the house and the people who will reside in it, their living needs and daily activities. He then turns to the mechanics of design and style, the setting for the house, and its role as a vehicle for personal expression. With such an enormous scope, this book alone could prepare a client for his encounter with an architect.

For those interested in the true-grit mechanics of creating a dwelling, *Your Engineered House* is imperative. An intensely personal and delightfully witty book by a man who is an experienced builder, it covers practically every aspect of home design and construction in technical detail. Roberts rejects many of the conventions of architecture and building in favor of more economical and utilitarian practices. The reader should not be put off by the drawings, which are crude but entirely adequate.

Carole E. King has degrees from the University of Colorado, the University of Wisconsin and Macalester College. She is presently on the staff of the Saint Paul Public Library's Arts and Audio Visual Services Department.

Although some knowledge of the development of the house throughout history is not necessarily essential to a client, it might help him to understand why such architectural anachronisms as basements and attics, which were once considered necessary, are seldom found in contemporary architecture. Architectural history can also provide a background against which one can weigh his own ideas.

An absorbing general history of the house, from its most primitive beginnings to the first decades of the twentieth century may be found in *The Evolving House; a History of the Home*, by Albert Farwell Bemis and John Burchard II. A pioneer work in this field, the book covers the significant developments in domestic architecture of every major culture in the world. Most of the coverage, however, is devoted to the houses of Egypt, Greece, Rome, and England since they heavily influenced the evolution of the American house.

Anyone who relishes unusual houses will revel in Claude Arthaud's *Enchanted Visions; Fantastic Houses and their Treasures*. With splendid photographs and drawings of buildings that are whimsical, surreal, grotesque, and sublime, the book portrays 25 of history's most incredibly extravagant houses. It is a delightful glimpse at the architectural eccentricities of the vastly wealthy.

Those who are interested in the English house should read *The House and Home; a Review of 900 Years of House Planning and Furnishing in Britain* by M. W. Barley. This is a historical survey of domestic architecture in England from the Middle Ages to the present. Instead of concentrating on the technical and aesthetic aspects, the author presents the evolution of the house as a response to social conditions. Illustrated with over 200 black and white photographs, the book offers a fascinating glimpse of centuries of British family life.

A captivating history of the United States in terms of its houses may be found in *The American Heritage History of Notable American Houses* by Marshall B. Davidson. From the founding of Jamestown to the present, the houses, their architects, builders, and owners are skilfully portrayed within

their historical context. Superb photographs, historical paintings, drawings, and floor plans enhance each chapter.

Aficionados of those enormous late 19th century wooden houses so prevalent on the eastern seaboard must read *The Shingle Style and the Stick Style; Architectural Theory and Design from Richardson to the Origins of Wright* by Vincent J. Scully, Jr. It was during the 1870's and 1880's, the author contends, that the architecture of wooden suburban homes came to influence later American work, particularly that of Frank Lloyd Wright. The book is thoroughly documented and graced with elegant drawings and photographs.

Traditional Japanese architecture can be particularly engaging because the Japanese home is a philosophical expression of harmony with nature. *Japanese Houses; Patterns for Living* by Kiyoyuki Nishihara is a cultural and physical history of the Japanese dwelling. The origins of the house, its varied forms, and the elements used in its construction are examined and illustrated.

Of narrower scope is *The Elegant Japanese House; Traditional Sukiya Architecture* by Teiji Itoh and Yukio Futagawa. Devoted entirely to one characteristic style of house building, this book is a supreme visual masterpiece. *Sukiya* is one of the two major traditional styles surviving in contemporary Japanese architecture. It emphasizes simplicity of design and the materials employed in construction. Exquisitely sensitive photographs and drawings reflect the essence of this refined style.

Many readers find the philosophy and theory of domestic architecture as exciting as the houses themselves. Two profound theorists whose work always reflected their integrity and ideas were Richard Neutra and Frank Lloyd Wright.

"Human habitat in the deepest sense is much more than mere shelter. It is the fulfillment of the search — in space — for happiness and emotional equilibrium." Richard Neutra believed all domestic architecture must be based on this premise. His book, *Life and Human Habitat*, stresses the architect's responsibility to provide not only an aesthetically pleasing environment, but, even more crucial, one which is suited to the client's physiology. A highly idealistic architect, Neutra closely studied the daily lives of his clients and designed to conform to their personal needs. The book shows many samples of this very humanistic approach.

For Wright, a beautiful house was a living organism splendidly adapted to its environment and free of superfluous ornament; a creation so harmonious with nature that it *was* nature. Building site, construction materials, architectural design, illumination, heating, even furnishings, were integral parts of a completed masterpiece. *The Natural House*, with photographs and drawings of over a dozen different homes, is a visual testament to this philosophy.

Just as important as the house is the setting in which it is built. The site need not be several acres on a cliff overlooking the ocean. It could be a small city lot with an exquisite backyard garden such as those the Japanese create. In his book *Mystery and Realities of the Site*, Richard Neutra maintains that the site affects our total being. "It suns or overshadows our growth and decay, our failures and successes, our dire withering away or our happy survival." This sensitive book examines many different types of settings and their houses within the context of Neutra's philosophy.

With the growth of population and the high cost of transportation and land, dwellings beyond the suburbs are becoming inaccessible and outrageously expensive. Consequently, there is a pressing need to house a maximum number of people in a minimum amount of space. Too many of these housing projects are inadequate or even inhumane. In such an overcrowded and noisy environment, every person needs privacy to preserve his health and sanity. In their book, *Community and Privacy*, Serge Chermayeff and Christopher Alexander propose a new plan — the urban cluster — whose one storey dwellings fulfill the basic living requirements and offer the individual optimum privacy as well as gracious sociability. Garden-courts which buffer one area of the house from another are

a vital feature of every dwelling.

Hubert Hoffman is another student of housing in areas of high population density. In *Row Houses and Cluster Houses* he examines the advantages of low-rise over multi-storey units. Instead of developing the ultimate housing plan, as did Chermayeff and Alexander, Hoffmann surveys a vast number of existing low-rise projects throughout the world. None of these dwellings is over three storeys high and each has its own private connection to a garden area.

Shelter presents alternative dwelling styles, some superb, some atrocious. It is a collection of essays on the history and theory of houses, designs and plans, personal building experiences, and copious photographs and drawings. It can serve as a manual for the do-it-yourself builder, a resource book for environmentalists, or merely a fascinating entertainment.

The books described here, plus many others on the design and history of the house may be obtained at most public libraries and bookstores.

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All these books are in the circulating collection of the Saint Paul (Minnesota) Public Library.

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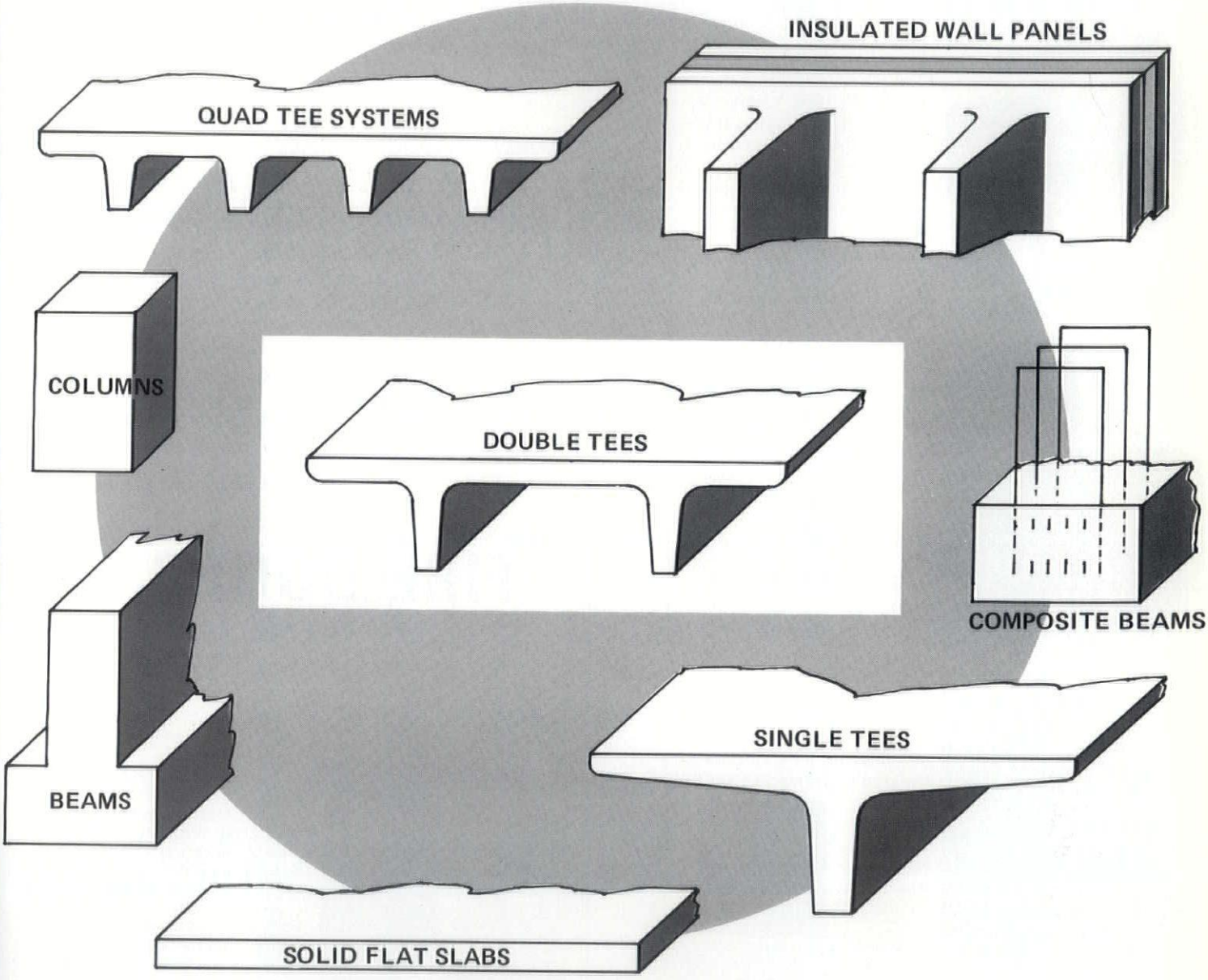

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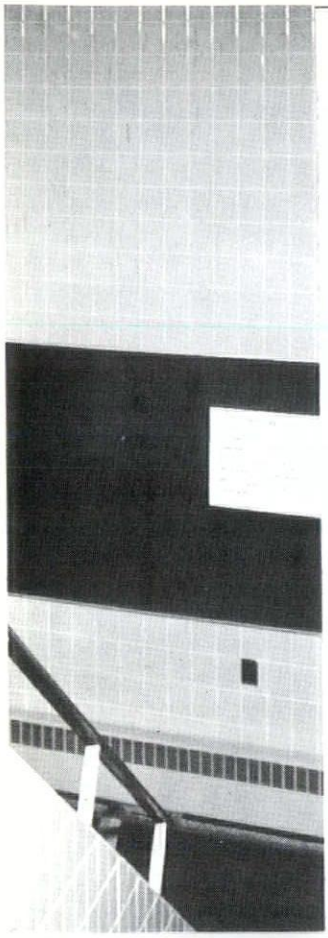

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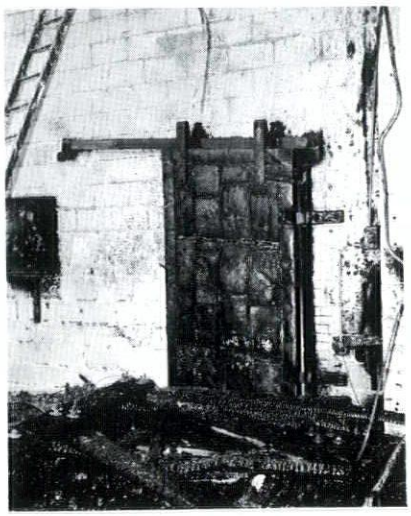

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The Community Design Center of Minnesota

By Craig Hess
Assistant Director

United States Congressman Donald Fraser reprinted in the April 23 Congressional Record the two-page spread on CDC in the January-February issue of the Northwest Architect . . . a first, by the way, for the center.

For approximately the past 10 months, the Community Design Center has been implementing its portion of the Basic Homes Program. By the beginning of May, the report of CDC's work was complete.

The Basic Homes Program is a federally-funded demonstration program for the development of housing for low-income, rural families. The Battelle-Columbus Laboratories administered the program and selected the Minnesota Housing Finance Agency (MHFA) as one of eight "design and development contractors" throughout the country. Economic Development Region II, a five-county area in north central Minnesota, was selected as the target area for Minnesota. The MHFA secured Inter Design, Inc. to develop house designs, Dan J. Brutger, Inc. to prepare cost estimates, and the CDC to conduct consumer research and to develop a delivery system and counseling plan. The CDC was involved because of our strong advocacy role and the desire and ability to spend considerable time with the target population.

During last fall and this past winter several trips were made to the target area, including one morning in Bemidji when the temperature was -34°. From the people we met and the things we observed on these trips, several very important concepts developed: first, the success or failure of a particular housing program is not determined by the final physical product alone, but also by the process through which the occupant arrives at the final product; second, the most innovative, resourceful programs can be developed at the local, community level and not by outside, supposedly "educated," groups. An excellent example of this concept is a volunteer group called Nee-Konis-Sidook Housing, Inc. which operates in Clearwater County. They are able to produce and sell 3-bedroom homes for

$5,000. Additionally, they are able to arrange financing for high credit risk borrowers. Yet the best price that our consortium could achieve for a 3-bedroom home is over $17,000. Further, any buyers of the Basic Home must meet standard FHA lending requirements. Although Nee-Konis-Sidook can undersell the Basic Home units, they are limited to three or four units per year.

The proposed (by CDC) delivery system would make heavy use of a series of local, volunteer housing corporations (community corporations). These community corporations receive back-up support from a mother organization (mom) through an individual who is nicknamed Johnny Appleseed. The role of the community corporations is to first organize themselves and then advertise the program, recruit the buyers, select the buyers and deliver the various counseling information. The intent is to develop a sense of trust between the buyer and the members of the community corporations . . . hopefully, persons the buyer already knows. Additionally, the community corporations are to be consumer advocates who ensure that the buyer understands what he is buying and his obligations to it.

The entire proposal for Phase II is contained in a 250-page report, delivered to Battelle-Columbus Laboratories. By July 1, Battelle and the U.S. Department of Housing and Urban Development will have reviewed our submissions, as well as those of the other seven "design and development contractors". Four contractors by July 1 will be granted $750,000 each and authorized to proceed with construction of 100 demonstration units. Hopefully, our Minnesota group will proceed into Phase II, the construction phase. If we do, it is unclear if or how the CDC will be involved.

The research and development for the delivery system, counseling plan and the preparation of the final report was done by Tim Mungavan (UYA Volunteer), Carole Gaskell (VISTA Volunteer) and Craig Hess (CDC Assistant Director).

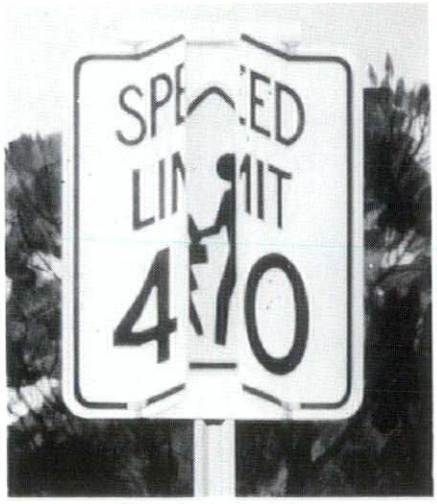
DULUTH PHYSICAL PLANNER POSITION OPENINGS

Senior Planner ($12,000 — $14,500) and Assistant Planner ($10,000 — $12,000) positions presently available with City of Duluth Planning Department. Emphasis is on physical planning — neighborhood sketch planning, site planning, coordinative work with private developers and neighborhood citizen groups, preparation of land use legislation, preparation of reports for zoning and subdivision design review, etc. Requires degree in planning or physical design related field (Senior Planner requires two years professional experience in addition). Send resume or call Richard C. Loraas, Director of Research and Planning, 409 City Hall, Duluth, Minnesota 55802. Telephone (218) 727-4522, Ext. 221.

New Products

Big, Small, Tiny, or Tall — The Folk Seat Serves All

The Folk Seat chair, fashioned of blow-molded polypropylene and designed for use in schools, convention centers and meeting situations has been introduced by Kruger, Co. The textured chair shell has a unique double-walled design which traps air and performs as a comfortable cushion. Four molded-in studs are used to affix leg frames and the chair shell permanently together. Standard or special colors are available. Contact the Krueger Co., P.O. Box 2097, Green Bay, Wis. 54306. ■

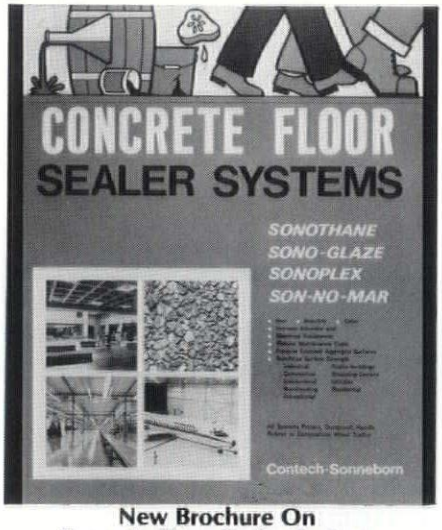


Now Introduced — Signs That Change Automatically

The 3M Co. has developed Varicom signs capable of detecting weather conditions and delivering a message accordingly by various time clocks and sensors. These signs are of two types: no message when closed, and a double message (one message when closed and another when open). Made of reflective sheeting, the signs are found to be almost maintenance free after six years of testing. Contact Edwin Neuger Assoc., 450 Baker Bldg., Minneapolis, Minn. 55402. 612-335-6621 or call Dick Rainbolt, 612-473-3889. ■

Sterner Decorative Fixtures Provide Soft Lighting

Decorative design is combined with a variety of lamps and poles in the new "Williamsburg" series of outdoor lighting from Sterner Co. These fixtures may be equipped with high-intensity discharge or incandescent lamps up to 300 watts. Translucent diffuser panels are available in various colors. A "Hinge-O-Matic" base allows the unit to be lowered for servicing. For more information about the Williamsburg series, contact Sterner Lighting Systems, Winsted, Minn. 55395. ■



New Brochure On Concrete Floor Sealer Systems

A brochure on concrete floor sealer systems has been released by Sonneborn Building Products, Division of Contech, Minneapolis, Minn. The brochure covers four of the concrete treatment systems, outlining their application and expected results. Sonneborn floor treatments are used to protect various types of concrete floors, and they act as a sealer against solvents and chemicals. For information ask for form No. SC-226 at Sonneborn-Contech, 7711 Computer Ave., Minneapolis, Minn. 55435. ■

A Royal Entry Way— The Britannia

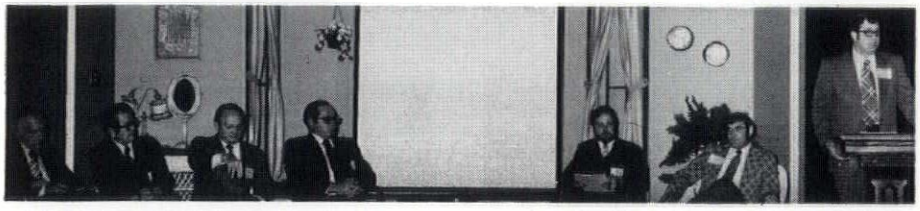
The Britannia, a carved entry door, has been added to Simpson Timber Company line. The carved center panel portrays a heraldic lion, reminiscent of medieval English royalty. Each of the nine panels in this door are a full 1 1/8 in. thick. Most sizes are available. Stiles, rails and mullions are selected Douglas fir or hemlock. Information is available from Simpson Timber Co., 2000 Washington Bldg., Seattle, Wash. 98101. ■

Producers' Council Election Results

Producers' Council Minneapolis Chapter's new offer's for the 1974 to 1975 Calendar year are as follows:

President.....Oscar Hallgren
First Vice-president ....Bob Snow
Second Vice-presidentDave Zielger
Treasurer.....Don O'Reilly
Secretary .....Ken Kline

We with the Northwest Architect want to wish you the best of luck for the coming year.



(Left to right) Clarence Hoekstra, Vice-president of sales, Och Brick & Tile Co.; Tom Eggen, sales manager, Charles M. Freidheim Co.; Fred McComb, regional manager, Portland Cement Assn., Ken Haroldson, business agent, Bricklayers Local #2; Dan Waarvick, fuel allocation officer, Dept. Civil Defense; Gary Davis, architectural representative, Endicott Clay Products Co; Fairbury, Nebraska; Tom Richardson, director, Minnesota Masonry Institute.

Architects Attend Conference On Masonry Energy Crisis.

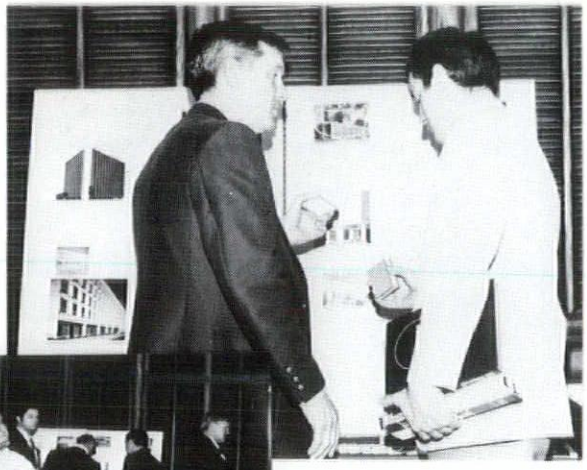
Nearly 80 area architects and masonry industry representatives participated in a round table discussion on the Masonry Energy Crisis sponsored by the Minnesota Masonry Institute. Held in a Twin Cities' dinner theater, the group lunched while viewing a visual presentation "Brick and Architecture" narrated by George E. Hartman, Jr. AIA, winner of the Louis Sullivan Award.

Leading the panel discussion and speaking on the Brick Industry were Clarence Hoekstra, Ochs Brick & Tile Company; Thomas Eggen, Charles M. Friedheim Company for the Block Industry and Fred McComb, Portland Cement Association for the Cement Industry.

According to Tom Richardson, Executive Director of the Minnesota Masonry Institute, the reception to this innovative presentation was favorable with many architects expressing interest in a similar future conference. ■

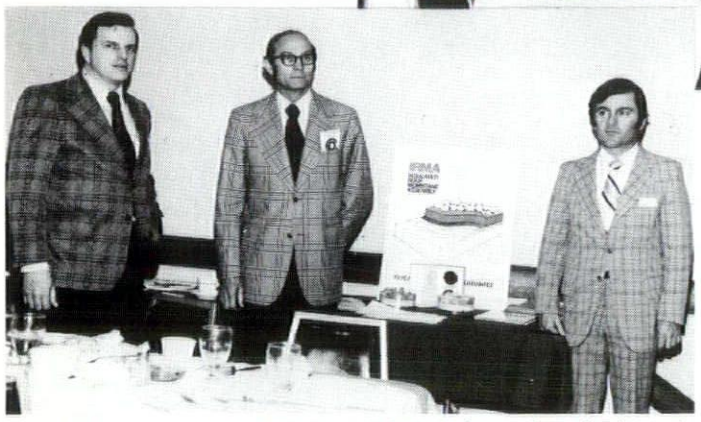
Annual "BOMA" P.C. Meeting — May 13

Don Ponto of H & H Robertson Co. (center) explains products and procedures to fellow participants.

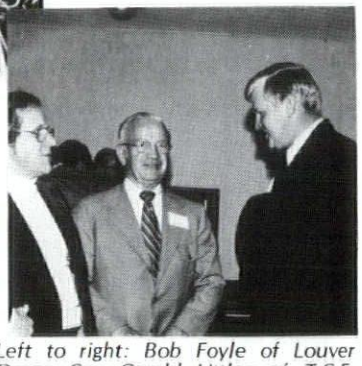


A product's advantages are explained to a member of the construction industry by John Straum of Carl Fogelberg Co.

On May 13, more than 90 persons from the Producer's Council and Building Owners and Managers Association gathered at the Normandy Hotel for the Annual "BOMA" P.C. Meeting.



Pictured left to right: Bob Sheppard of U.S. Plywood, Bud Oberg of N.S.P. and Dave Plummer of Edward Sales Co.



Left to right: Bob Foyle of Louver Drape Co., Gerald Uttley of T.C.F. Corporation and president of "BOMA", Dale Lommen of Mahin Walz Co. and president of Producers' Council.

Lagerquist Elevator Acquires Glenmar-Hutchinson Co.

Lagerquist Elevator, Minneapolis, has purchased controlling interest in the Glenmar-Hutchinson Company, upper midwest manufacturer and distributor of diversified architectural specialty items, it was announced by Robert V. Jacobs, president of Lagerquist. The purchase price was not disclosed.

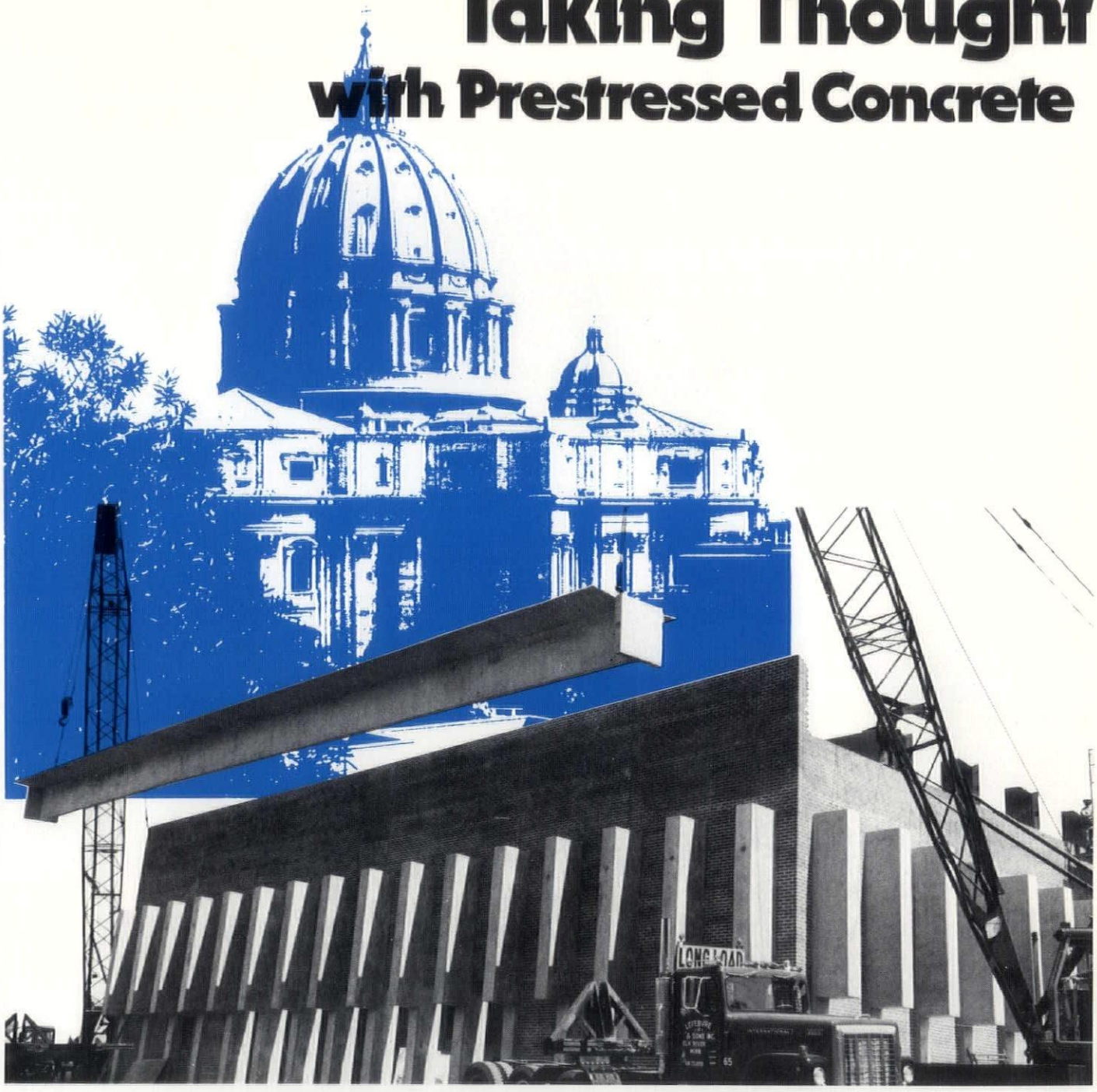
"This acquisition will enable Lagerquist to offer a more complete service to architects and general building contractors throughout our marketing area," said Jacobs.

Glenmar-Hutchinson, formed in 1957, handles a broad range of products including demountable office partitions, folding walls, shower, toilet and dressing room stalls, acoustical phone booths, bulletin boards, chalk boards and other visual aids. The company will retain its original name and will operate as a wholly owned subsidiary of Lagerquist under the direction of Glen Lien, former president of Glenman-Hutchinson. Lien becomes vice-president and general manager. John Staum has been appointed sales manager.

Founded in the Twin Cities in 1882, Lagerquist is a leading installer of freight, passenger and residential elevator systems. Another division, L-Pak-Co., was formed last year to install and service commercial and industrial trash compactors. ■

Index to Advertisers

Taking Thought with Prestressed Concrete



The Vatican stands as a monument to man's creative thinking. The type of thinking which brought mortar and stone together into one of the great religious edifices of all time.

Today's Prestressed Concrete structures capture man's religious thought in a modern, space age society. The Abiding Savior Lutheran Church, shown being completed with Prestressed Concrete giant roof beams, is a monument of beauty and function.

Here is a 750-seat sanctuary and educational complex that is not only a sanctimonious place to worship but a pleasant atmosphere for religious learning. Prestressed Concrete made it possible. Pictured being hoisted into place is a giant single "T" roof beam. The component is 93 feet 6 inches long, 8 feet wide with a special end diaphram. It provided many construction advantages: fabricated off the job site and independent of high-priced on-site construction cost factors; pieces shipped as needed to the job-site; erection was fast and trouble free. The completed church is both functional and pleasant — truly a source of pride to the congregation.

PROJECT: Abiding Savior Lutheran Church
Spring Lake Park, Minnesota

ARCHITECT AND
PROJECT MANAGER: Ekberg-Petri, Inc.,
Minneapolis, Minnesota

ENGINEER: Frank Horner Co.,
Saint Paul, Minnesota

PHOTOGRAPHY: Courtesy of the Sun Newspapers

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Perry Masonry

and the case of the wall of great value.

Brick and Block were accused of placing great value on themselves when in fact, the Complainant maintained, masonry is merely other earthy materials shaped into brick and block.

Perry Masonry, however, had no trouble convincing the jury that Brick and Block are sturdy (with great compressive strength), last almost forever, practically need no maintenance, have a surprising amount of insulation value and great fire resistance.

Therefore, a wall of great value.

The verdict: case dismissed; proving once again that when you want the best, build with masonry.

minnesota masonry institute

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