

# ARCHITECTURE MINNESOTA

January February 1976

LIBRARY

Donald Canty, Editor  
AIA Journal  
American Institute of Architects  
1735 New York Avenue N.W.  
Washington, DC 20006  
A20

**Furniture And Fabrics**  
**\$1.50**



WALLCOVERING

## CALL ON AN EXPERIENCED TEAM

For more than 25 years the people at Fred G. Anderson have worked with architects and interior designers throughout this area. Their knowledge and experience in the wall covering field is unsurpassed. Behind this team is the largest stock of commercial wall coverings in the midwest. Anderson's also maintains a large library of wall coverings and can offer prompt delivery on most items.

Fred G. Anderson's Miracle Mile Studio is your one source for service and quality.

For wall covering call on an experienced team.  
Fred G. Anderson, Contract Department.



# FGA

Fred G. Anderson, Inc.  
Contract Department  
5217 Excelsior Blvd.  
Miracle Mile  
St. Louis Park, MN 55426  
(612) 920-5620



# ARCHITECTURE MINNESOTA

Official publication of the Minnesota Society of Architects

Volume 2, Number 1

January/February 1976

## Editor

Bernard Jacob AIA

## Editorial Production

Janine Morrow

## Art Director

Kenneth M. Nelson

## Art

Mark Wilken, Patricia Korman,

Sherry Reutiman

## Publisher

Paul Posel

## Advertising Sales Manager

Allan J. Duerr

## Advertising Sales

Steven L. Muellner

## Advertising Production Manager

Barbara Westra

## Circulation Manager

Debbie Hickman

## Business Manager

Ruth Carlson

*Architecture Minnesota* is the official publication of the Minnesota Society of Architects.

Minnesota Society of Architects, AIA,  
Executive Director, Daniel J. Sheridan, 100  
Northwestern National Bank Building, Saint  
Paul, Minnesota 55101, (612) 227-0761.

Committee for *Architecture Minnesota*:  
Leonard S. Parker, chairman, Bernard Jacob,  
Phillip MacMillan James, James Lammers,  
James Lindberg, Fred Richter, Milo Thompson,  
John Weidt, Eric Wheeler.

Editorial offices: Bernard Jacob AIA, 404  
McColl Building, Saint Paul, Minnesota  
55101, (612) 224-9469.

*Architecture Minnesota* is published by Bill  
Dorn Associates, Inc., 7101 York Ave. S.,  
Minneapolis, Minnesota 55435, (612) 835-  
6855.

Advertising and Circulation: *Architecture  
Minnesota*, 7101 York Ave. S., Minneapolis,  
Minnesota 55435, (612) 835-6855.

When changing address, please send address  
label from recent issue and your new address.  
Allow four weeks for change of address.

A BEST BUY	5
ARCHITECTURE AT A GLANCE	9
CONSTRUCTION INDUSTRY NEWS	12
THE DESIGN PROCESS AT HERMAN MILLER	19
WHAT IS GOING ON GEORGE NELSON	21
CHARLES AND RAY EAMES	22
ALEXANDER GIRARD	25
ROBERT PROPST	28
BACK TO THE CITY	30
THE BICENTENNIAL AND ARCHITECTURE	35
BOOKS	47

Postmaster: Send form 3579 to *Architecture  
Minnesota*, 7101 York Ave. S., Minneapolis,  
Minnesota 55435. Controlled circulation  
postage paid at New Richmond, Wis. 54017.  
Subscription rate: \$9 for one year.

Copyright ©1976 by *Architecture Minnesota*

Cover: Photograph of an early study for  
fabric colors by Alexander Girard, worked  
out with transparent tissues. See p. 28.  
Photo courtesy Walker Art Center, Min-  
neapolis



# Keystone vs. Gravel

First of all about Keystone. Keystone is Shiely's own brand of Crushed Stone. Because of our special methods of blasting, crushing and grading we feel we get a particularly consistent, high quality crushed stone. We call it Keystone.

Now, let's clear up a couple of popular misconceptions about crushed stone. The first is, "It's about the same thing as gravel." True, it is similar in some respects . . . the same specific gravity for instance, 2.68. But a basic and important difference is angularity. Because crushed stone is 100% angular, it provides for an excellent bond in concrete, adds extra stability to bituminous mixtures and in base material it becomes stronger with compaction.

Another misconception is "Crushed Stone is more expensive than gravel." The truth is that in many cases, crushed stone is actually less expensive to use than grav-

el. When used as base material for instance, the thickness of the base course can often be reduced. It costs slightly more per ton, but usually less per job.

Another important consideration in some concrete jobs is "popouts." Because there are no spall materials in crushed stone, "popouts" and the problems caused by them are virtually eliminated.

Because crushed stone is a manufactured product there is an almost limitless range and variety of products. Among the many we offer at Shiely are these: Base Aggregate, Concrete Aggregate, Bituminous Aggregate, Aglime, Riprap, Driveway Stone, Seal Coat Aggregate, Filter Stone, Macadam Stone, Pipe Bedding, Railroad Ballast and Landscape Stone to name a few.

At Shiely we try to have a broader range of commercial aggregates than anybody else in the business.

## What's the difference?



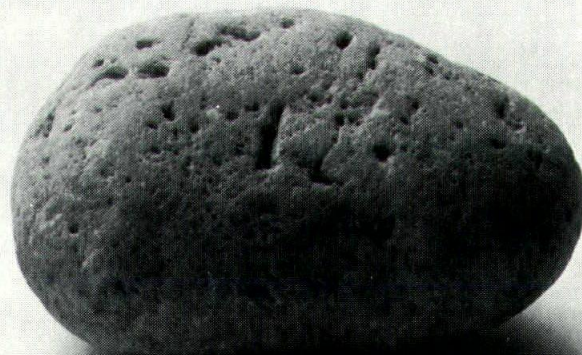
## **J. L. SHIELY CO.**

QUALITY COMMERCIAL AGGREGATES/READY MIXED CONCRETE

1101 Snelling Avenue N.  
St. Paul, Minnesota 55108  
Phone 646-8601



Keystone

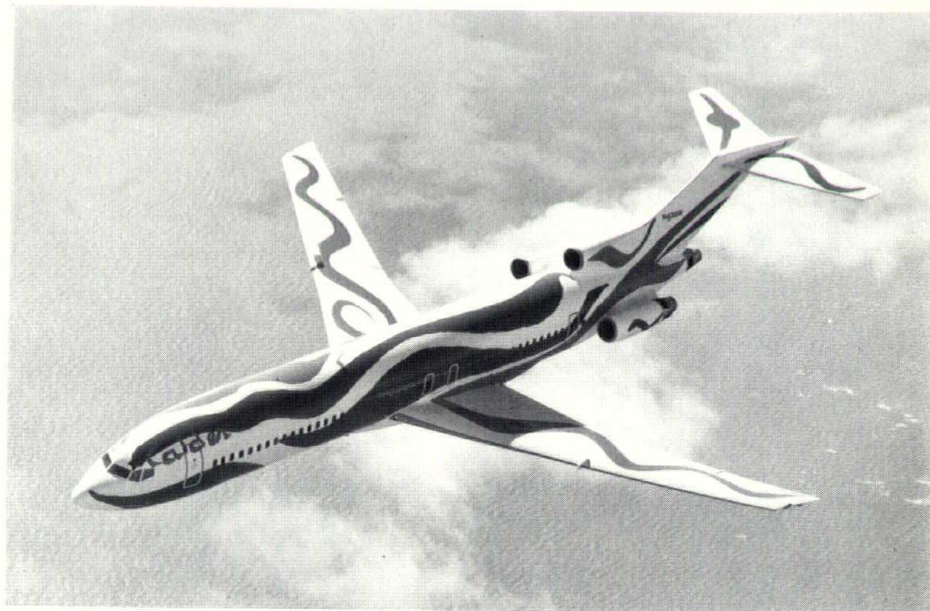


Gravel



# A BEST BUY

From the Editor



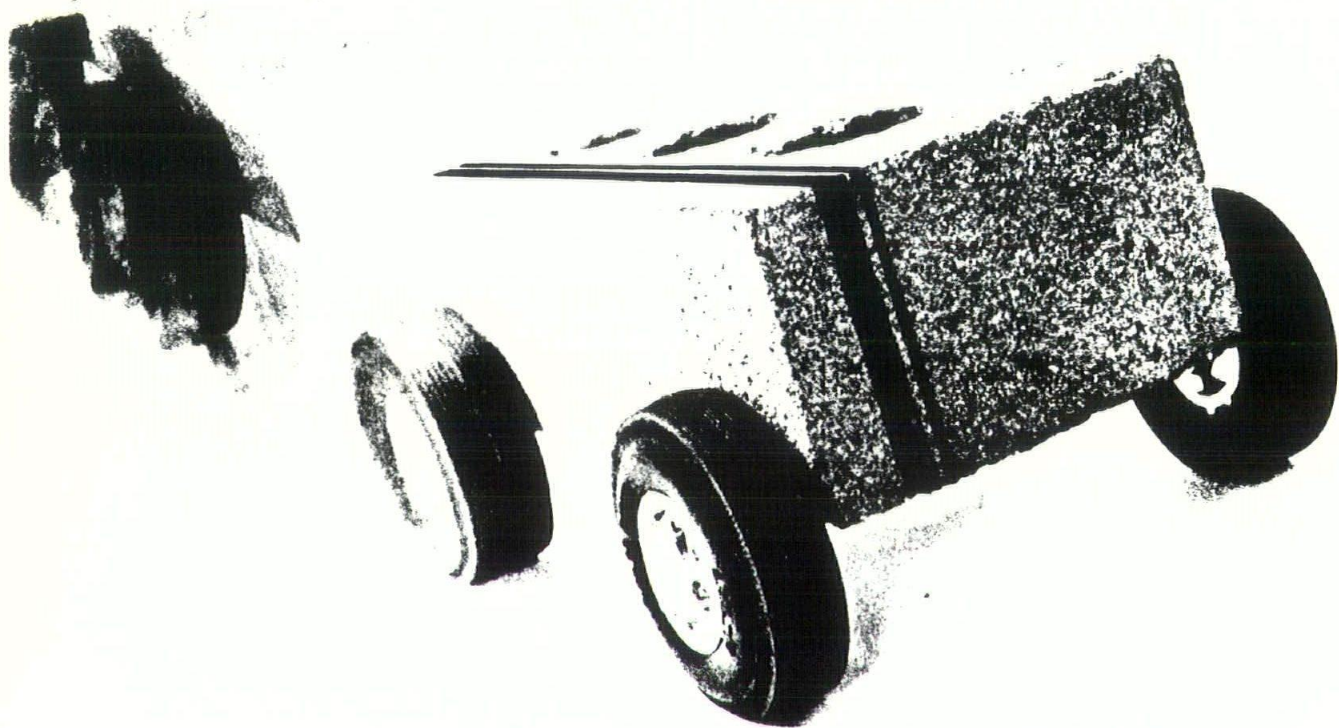
This is a photograph of Braniff's Boeing 727 passenger jet painted to a design by Alexander Calder, as a salute to the nation's Bicentennial. The design, "Flying Colors", suggests a flag, with red and blue wave-like patterns. The artist's signature is about 14 feet long and the airline's name has been omitted. Braniff is quite confident that everyone will identify Calder's design with them and unless other airlines also engage Calder, they are likely to be right. The American artist and his art have won their place in the business world. Braniff's exuberance, zeal and audacity are very much in the spirit of the Bicentennial. Braniff of course is not new to design. In the 1960's it engaged Alexander Girard (see also page 28) to completely redesign their corporate image, from matchbook covers to airplanes to terminal lounges. They have aggressively continued their design leadership on the assumption, one must guess, that it helps their competitive posture to be remembered for their visual and

sensual impact. Their distinctive logo and colors help them retain and enlarge their share of passengers and they have, ostensibly, found that good design, that art at its most eloquent, is good business.

It becomes regrettable then that a consumer group should raise objections. An Associated Press story carried by the Minneapolis *Tribune* on November 14, 1975, reports that the Aviation Consumer Action Project, a nonprofit organization, has asked the Civil Aeronautics Board to assure that costs of the project not be borne by Braniff passengers. This is a naive objection because if the costs were to be borne by Braniff passengers, the fares would have to be increased and Braniff would thus lose customers and also need CAB approval to do so. What is more disheartening, however, is that a consumer group, a vigilant enlightened, organization whose purpose it is to protect the flying public, is so entirely — and not untypically — oblivious to all



# Build faster for less.



## Use load-bearing brick.

Brick offers a better way to build.

Modern brick bearing wall design can speed up construction by weeks or months. It can cut construction costs by as much as 10%.

How? Thin brick bearing walls work together with roof and floor systems to create a structure that can handle the weight of both high and low buildings—apartments, factories, or office buildings. This simplifies the construction process. Steel and

concrete structural frames are not needed and finish work can begin on one floor while the next floor up is being erected.

But the savings don't stop with construction. Maintenance expenses are reduced over the life of the building. Brick can take anything that weather or man can throw at it. It doesn't warp, dent, bend, buckle, or rot. And it never needs painting.

At the same time, brick bearing

walls provide superior sound control and fire-proofing. They offer the aesthetic appeal of exposed interior brick walls. All at no additional cost.

Brick bearing walls have proven their advantages in construction all over the country. Brick has offered a better way to build for thousands of years. It still does.



minnesota masonry institute  
7851 METRO PARKWAY SUITE 103  
MINNEAPOLIS, MINN. 55420  
PHONE 612-854-0196



matters of artistic merit. Most State legislatures have statutes which require that some portion of each building budget (5% typically) be assigned to art or artistic endeavors in connection with the building. This is not just to help support artists, but in a much broader sense to help humanize our built environment. When an airline is willing to engage an artist to produce a design for an airplane it should be applauded by any and all consumer groups. There are of course many areas of the aviation industry begging the consumer groups' attention, e.g., the cost of meals, ground facilities and, above all now, the cost of fuel — not to mention the ecological morality of the airlines' fuel consumption. Of course, the flying public is paying for Calder's design as well as for anything else that the airline does. It is also paying for plastic meals, inflight television, for all the advertisements in the papers and on billboards. It is ironic that art rates higher with an airline than with a consumer group. Consumers Union, the oldest consumer organization, which publishes product ratings in *Consumer Reports* cannot be accused of ever having been seduced by the design of any product either. Indeed it manifestly ignores the appearance of the products it reports on, from toasters to automobiles, the assumption being, probably, that if a product passes certain tests as to function and value, it will by necessity be visually acceptable. Form follows function. Quite so, but all things being equal, a turquoise toaster deserves a different rating than a chrome toaster. Consumers do care about design and Braniff has found that out. Consumer groups should also, so should all branches of government. As a tribute to the Bicentennial some patriotic city might retain a Calder to provide a design for its police cars or sanitation trucks. □

— Bernard Jacob

## Getting you everything you'll ever want in ceramic tile is Child's play

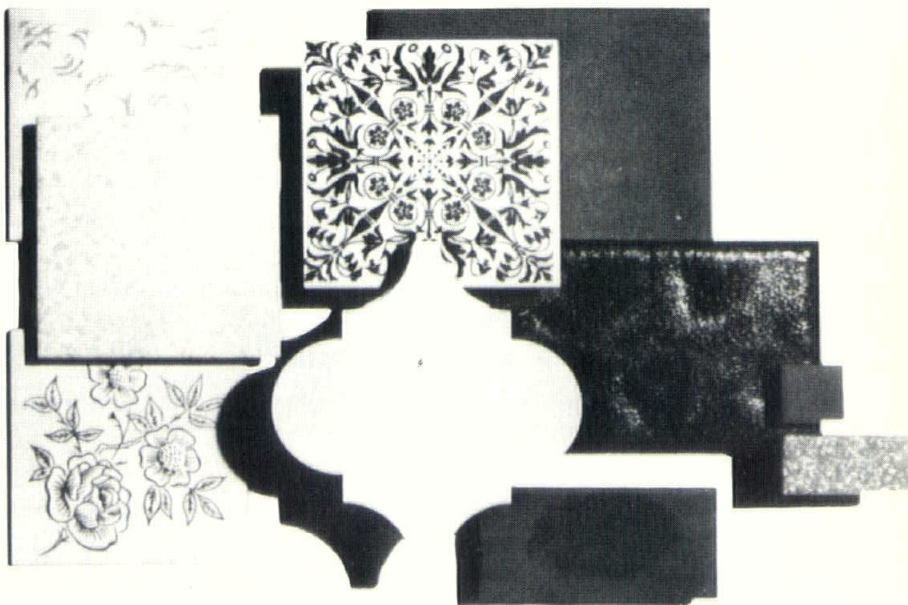
At Rollin B. Child Inc. we can get you just about anything you'll ever want in the way of ceramic tile, because we stock and sell Romany-Spartan® American-made ceramic tile, one of the broadest lines available in this or any other country.

We offer a rustic line, a water-marked crystal line and a veined line, a dappled line and a decorative line, plus a fantastic selection of unglazed ceramic mosaics and the

traditional bright and matte glazes, too.

Next time you need ceramic tile, turn to the company that can do it all from one source . . . by the truckload or by the carton. (We also stock large quantities of Summitville Quarry Tile and feature imported tiles from France, Italy and Japan.)

For more information, call Rollin B. Child Inc. at 938-2785 in the Metropolitan Twin City area, or on our Watts lines—Minnesota 800/552-7687, Other States 800/328-8296.





# CONSUMERISM AT HIGH TIDE

In times of economic dislocation, consumerism reaches high tide. Buyers are understandably concerned about values. They're more insistent than ever that dollars be used efficiently. And that insistence and concern applies to both private and public spending.

Consumerism certainly and properly extends to an industry as visible as construction. Which fact underscores the importance of letting separate bids for the Mechanical, Electrical and General Construction portions.

Separate bids result in better cost efficiency. So much so that more and more cities and states require separate bids and let separate contracts in all publicly financed building. The value received is unmistakable.

When happier economic days are here again, consumerism may ebb but it won't ever disappear. For that reason, architects and engineers will continue the valuable practice of letting prime construction component bids separately.



TWIN CITIES  
PIPING INDUSTRY ASSOCIATION



NATIONAL ASSOCIATION OF  
• PLUMBING • HEATING  
• COOLING CONTRACTORS

---

## PIPING INDUSTRY DEVELOPMENT COUNCIL

---

OF MINNEAPOLIS AND ST. PAUL



# ARCHITECTURE AT A GLANCE

The seventh day was used for rest after workmen took six days and 612 white bricks to create a shepherd figure on the Shepherd of the Grove Lutheran Church in Maple Grove. Minneapolis architectural firm Armstrong, Torseth, Skold and Rydeen received a Merit Award from the Minnesota Masonry Institute for the design of the one-story, \$340,000 church which will be completed in January.

Wisconsin's first ecumenically owned campus religious center has been dedicated on the Eau Claire campus of the University of Wisconsin. Designed by Hammel Green and Abrahamson, Architects and Engineers of Saint Paul, the Ecumenical Religious Center houses activities for 11 religious denominations. Architectural focus of the Center is the 300-seat Centrum which is used for lectures, concerts, drama, cinema and meetings.

While most Minnesotans were defrosting garage-door locks in search of warm winter parking spots, Grebner-Schoen Architects was establishing an art gallery in a remodeled garage. The Gallery Garage will exhibit and sell drawings, paintings, photographs, pottery and jewelry done by a variety of local artists. The gallery, located with the architectural firm at 2412 Valentine Avenue in Saint Paul, is open weekdays from 9 a.m. to 4 p.m.

Construction of a second-floor skyway connecting Powers and J.C. Penney department stores in downtown Minneapolis is being negotiated among the stores and several banks. Cities throughout the country have begun designing skyway systems similar to those in downtown Minneapolis and Saint Paul, but according to Minneapolis architect Edward F. Baker, most "are doing it wrong." Baker, who designed the first leg of Minneapolis' controlled-climate skyways in 1962, says the biggest danger faced by cities developing skyway systems is the tendency to seek public funding for the passageways. All of Minneapolis' skyways have

been privately developed; the city's masterplan ultimately calls for 64 city blocks to be linked by a network of 76 skyways.

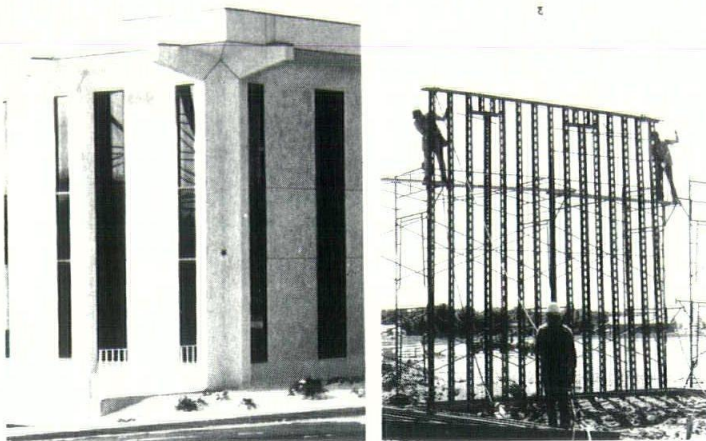
A 10-store shopping center with an interior mall and restaurant is nearing completion at 50th and France, the border between Edina and Minneapolis. The center, Edina Five-O, includes gift and fashion shops and a 300-stall, three-level parking ramp located in the rear. Architects for the project, Korsunsky-Krank Architects of Minneapolis, designed a shop-lined walkway which runs diagonally from the front of the center to the parking ramp. Four large skylights framed in rough hewn cedar, a terrazzo floor and cedar siding are among the center's highlights, according to architect Ron Krank.

The Ramsey County public library board has chosen Setter, Leach & Lindstrom, Inc., of Minneapolis to design the new North Saint Paul Branch Library. The architects began planning and design in December, aiming for a groundbreaking ceremony by spring. A \$4.8 million library for the Saint Paul campus of the University of Minnesota has top priority among University construction budget requests to the 1976 Legislature. In drawings for the proposed library, prepared by Frederick Bentz/Milo Thompson & Associates of Minneapolis, the new structure is constructed around the existing library, built in 1952. To trim energy use, the firm suggests implementing two-speed heating and cooling fans, heat recovery systems, insulated glass and large windows only on the building's north side.

Plans for a 65,000-seat, undomed stadium next to the Mississippi River in Minneapolis' Industry Square Area were unveiled in December by Saint Paul firm Hammel Green and Abrahamson and two Seattle, Wash., architectural and engineering firms. The proposed stadium, estimated to cost between \$60 and \$65 million, would replace Memorial Stadium at the Uni-



# minne-wall



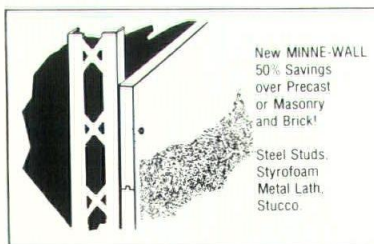
## DOES IT ALL!

- **DESIGN FREEDOM.** This superior, flexible wall system of steel stud and metal lath construction permits canted wall, pierced walls and any exterior **and** interior finishes.
- **STRENGTH.** Minne-Wall is 10 inches thick compared to 12 to 16 inch thick conventional walls. Yet it compares favorably in strength. Bearing walls support roof loads for wide, clear interior spans.
- **INSULATION & FIRE RESISTANCE.** Tests confirm Minne-Wall has superior insulating qualities. That's extremely important in these energy saving times. Built in warmth is flexible too in order to easily accommodate plumbing and electricals.
- **ECONOMY.** Minne-Wall talks loudest here. Minne-Wall is far less costly than masonry and tilt up extruded walls. Yet has all the fine appearance features of stone, masonry or just about any exterior or interior finish at less money. Super-fast to erect too.

CALL CLINT FLADLAND

*"The Answer Man"*

for complete, no  
obligation information



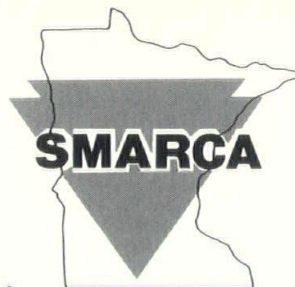
versity of Minnesota and Metropolitan Stadium in Bloomington and would serve the Minnesota Twins and Vikings, the University Gophers and be useable for soccer. An attempt is being made to raise private funds for the stadium and land, because state legislators have indicated any facility must be privately financed.

While business leaders and state legislators study the stadium proposal, Hammel Green and Abrahamson will be honored in February by the American Association of School Administrator and the American Institute of Architects. The firm's designs of the Rosemount High School Resource Center and Apple Valley Senior High School will be displayed at the 1976 Exhibition of School Architecture at Atlantic City, N.J. The schools were chosen for display because of their energy-saving designs. Rosemount's resource center uses a multizone air unit which allows for changing sun peaks during the day. Energy consumption at Apple Valley Senior High is cut through a ventilation system which circulates variable amounts of air as needed.

Use of solar energy in a proposed addition to the Dakota County Area Vocational Institute (AVTI) may increase chances of locating a national solar energy center on the University Research Center property in Rosemount, the AVTI board has been told. Site of the computer-linked center, to be funded by the Solar Energy Research Development and Demonstration Act of 1974, will be influenced by the proximity of teaching and research facilities. Saint Cloud architect Fred Wemlinger is among nine citizens appointed to a task force by Governor Wendell Anderson to study possible location of an energy center in Minnesota.

Anoka-Hennepin AVTI has applied for \$75 thousand in federal funds to construct a solar energy collector, which would be used not only for energy conservation, but also as a teaching tool for a course offered in Solar Equipment Maintenance. Architect Don Pates of the Minneapolis firm





Thorsen & Thorshov Associates contributed his time to help develop the program proposal submitted in December to the Division of Solar Energy in Washington, D.C.

**The feasibility of building a large, jointly owned office complex is being studied by Winsor/Faricy Architects of Saint Paul for six regional co-ops.** Hoping to cut individual costs, the co-ops would share a building which would house services such as a cafeteria, a management training program, an auditorium and medical offices. If built, the complex could contain between 600,000 and 1 million square feet of office space (approximately the size of the IDS Center). Commissioners of the study are Midland Cooperatives, Inc.; Land O'Lakes, Inc.; Farmers Union Central Exchange (CENEX); the Farmers Union Grain Terminal Association; Mutual Insurance Companies and the Farm Credit Banks of Saint Paul.

**The Duluth firm of John Ivey Thomas/Thomas A. Vecchi Inc. is studying costs of renovating the Port Rehabilitation Center,** a residential treatment center for chemically dependent men. The Duluth Center, operated by the Bethel Society in a building it erected in 1905, could lose its certification because the facility has fallen below several state and city codes. The Paulucci Family Foundation and the Congdon Foundations of Duluth have provided the funds needed to plan the renovation.

**Architect Jon Gravender has established his own architectural and urban-design consulting firm.** Gravender, formerly with the Hodne/Stageberg Partners, established his office at 4941 France Ave. So. in Minneapolis, (920-5588).

**Winsor/Faricy Architects of Saint Paul has been selected by the building committee of the Saint Paul civic center theatre project** to design a performing-arts theatre located in the area of the Civic Center in downtown Saint Paul. Cost of the project is approximately \$10 million.

**Two Minneapolis architects have been designated outstanding entrants in the Roosevelt Island Housing Com-**

**petition for 1975.** Jonathan Miller of Dimension Architecture and the Hodne/Stageberg Partners, Inc., recently had their entries displayed in an exhibition at the McGraw-Hill Building in New York City. Of the competition's 260 entries, the exhibition was limited to four co-winners and the 31 entries chosen as outstanding.

**The state designer selection board recently announced architects chosen for an \$8 million remodeling of the state office building's interior and the architectural and engineering firms chosen to work on nine state hospital buildings** which have fallen below Life Safety Code standards. Selected for remodeling of the State Office Building was **Rafferty, Rafferty, Mikutowski & Lundgren** of Saint Paul. Chosen from more than 100 candidates for the state hospital projects were: **Horty, Elving & Assoc.**, Minneapolis, Anoka State Hospital; **Rafferty, Rafferty, Mikutowski & Assoc.**, Saint Paul, Brainerd State Hospital; **Robert D. Hanson Architect**, Minneapolis, Cambridge State Hospital; **David Todd Runyan & Assoc.**, Minneapolis, Faribault State Hospital; **Roger J. Keiser AIA Architect/Planner**, Fergus Falls, Fergus Falls State Hospital; **Spaulding Engineering Co.**, Saint Paul, Rochester State Hospital; **AEI Design, Inc.**, Minneapolis, Saint Peter State Hospital; and **Armstrong, Torseth, Skold & Rydeen**, Minneapolis, Willmar State Hospital.

**New environmental works by Robert Irwin, the California artist who deals with the viewer's perception of such visual phenomena** as light and space will be shown at the Walker Art Center in Minneapolis from February 28 through April 4.

Included will be two earlier works in the Art Center's collection, and the re-installation of Irwin's "scrim" piece first shown in the Art Center's **Works for New Spaces** exhibition in 1971. Irwin's art is architectural and atmospheric. He creates spatial "situations" that challenge the observers' perceptions of volume and distance.

For further information contact Noel Schenker, Minnesota Society of Architects, 227-0761. □

## ENERGY - OUR FUTURE

.... The sheet metal industry is participating in implementation of proper energy conservation.

.... Contributing to solar experimentation and supporting improved standards for energy conservation in new buildings.

Contact our Association office for information.

### Sheet Metal Industry Fund of Minnesota

2929 University Ave. S.E.  
Minneapolis, Minn. 55414  
612/331-7136

## Carl W. Fogelberg Co.

### HEADQUARTERS FOR BUILDING PANELS

- ALLIANCE WALL — Porcelain Enamel, Laminated Veneer, Sandwich and Chalk-board Panels
- ERDL PERFORATING CO. — Three Dimensional Panels
- FERRO ENAMELING — Custom Embossed Panels, Porcelain Enamel, Aluminum, Weathering Steel, Copper
- WALCON CORP. — Metal Building Panels and Louvers

**CALL 646-7306**  
276 N. Snelling Ave., St. Paul, Mn.  
55104



# CONSTRUCTION

Robert J. Snow

I had the privilege of representing the Minnesota-Dakota Chapter at National Conference of The Producers' Council held during the last week in October at Key Biscayne, Florida. U.S. Secretary of Labor John T. Dunlop, speaking to those in attendance at the 54th conference of P.C., stated that the major concern of government should be to stimulate the private economy rather than to create millions of new government jobs. Dr. Dunlop also pointed out two important lessons to be learned from the present economic conditions: 1. The inability of economists to make accurate predictions. 2. The realization that we live in an **interdependent** world. Prices on food, oil and other raw materials have become international and not just **local** concerns.

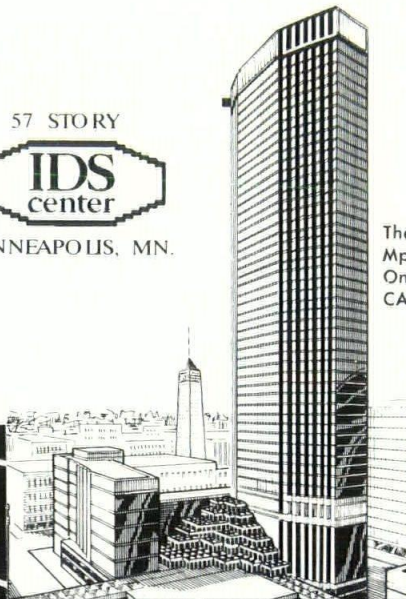
The newly elected national president of Producers' Council is Richard I. Morris, W.R. Grace & Co., Cambridge, Mass. Among others, Robert E. Hall, V.P. sales and marketing, Honeywell, Inc., Minneapolis, was elected treasurer and G. Richard Horton, Trane Co., La Crosse, Wisconsin, was elected to the Board of Directors from this area. Frank Hetman, President of DeVac, Inc., Minneapolis, continues as a director and is now also serving as a member of the executive committee.

Tom Doherty, well-known local representative of Armstrong Cork Company, has been promoted to manager of national accounts for his company. This will necessitate a move to Chicago. Those of us who know him are sure he will handle his new responsibilities with ability and enthusiasm, but we hate to see him leave this area. Generally, it seems, success begets "peripatetic consequences" when employed by large corporations.

A valuable new "tool" which will benefit both the manufacturer and the specifier is CSI's "Manu-Spec®" program which makes it possible for proprietary specifications to be prepared

57 STORY  
**IDS center**  
MINNEAPOLIS, MN.

The IDS Tower in Downtown Mpls. Contains Over One Million Sq. Ft. of CARNEY MATERIALS.



## CARNEY 3 Lb. Density SOUND ATTENUATION

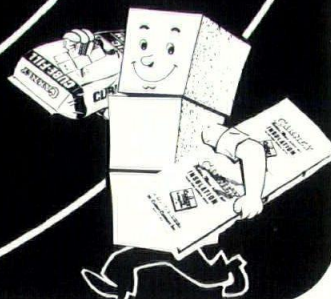
- HIGHEST ACOUSTICAL EFFICIENCY
  - BEST FIRE RESISTANCE
  - SPEEDY APPLICATION
- PRECUT FOR STANDARD STUDS

CARNEY'S FULL LINE OF INSULATION PRODUCTS

- Metal Building Insulation
- Sound Attenuation
- Loose Wool
- Industrial Felts
- House Batts
- Blowing Wool
- Sill Sealer
- Carney Cubefill

**CARNEY**  
AND ASSOCIATES

P.O. BOX 1237 MANKATO, MN. 56001  
PHONE: (507) 345-5035





# INDUSTRY NEWS

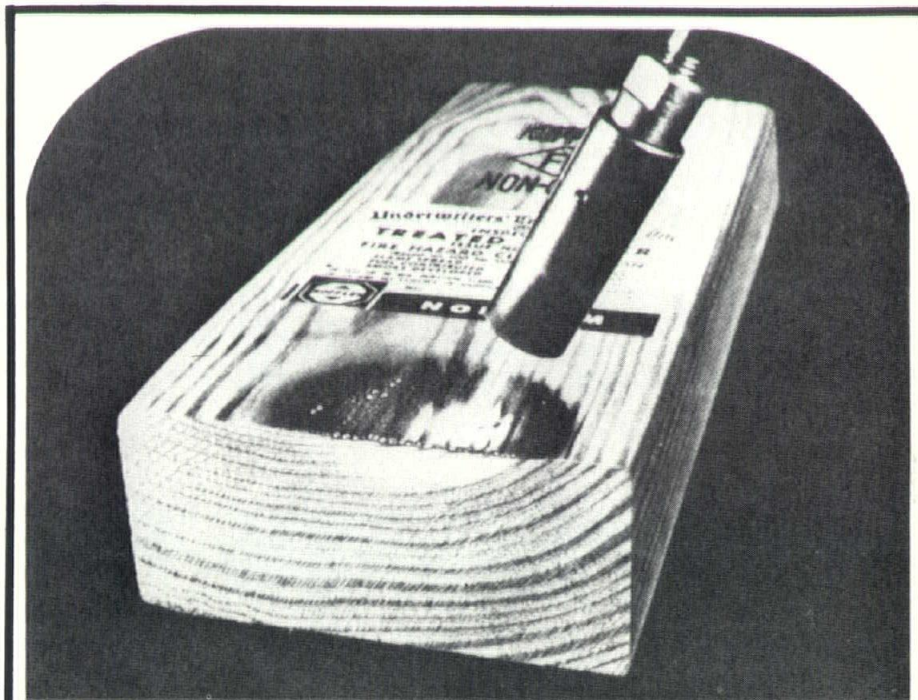
according to the standard three-part format. When used, it should go far in alleviating a common problem of specification writers, i.e. how to write a "spec" for a product based only on skimpy information gleaned from product literature or a so-called "Guide Spec" provided by the manufacturer and seemingly written by someone totally unfamiliar with specification requirements. 3M Company was one of the very first manufacturers to subscribe to the "Manu-Spec®" program.

The Marble Institute of America, representing 60 marble fabricators, recently elected Denton White, of Drake Marble Co., Saint Paul, as national president.

It is obvious that we must all focus more attention on what is going on in Washington because of such things as labor legislation, OSHA, consumer protection, environmental issues, and tax laws. If you want to get involved but don't quite know how, write to Bill Rooney, Public Information Manager, Louisiana-Pacific Corporation, 1300 S.W. Fifth Avenue, Portland, Oregon 97201 and request a copy of his recently published 12 page guide on "How and To Whom To Voice Your Views on The Issues." It names leaders in Congress, members of Senate and House committees, as well as the senators and representatives from each state. Louisiana-Pacific is sponsoring a "get-involved, make-a-difference," "yes, we can" program and this booklet is part of what sounds like an excellent public-interest program.

Speaking of government programs, the following OSHA report appeared in "Meter", the employee publication of the Oklahoma Gas and Electric Company:

*The Department of Labor has announced that OSHA (Occupational Safety and Health Administration) had conducted 6479 workplace inspections during April, resulting in the issuance of 5274 citations alleging 27,991 violations of job safety and health standards. Proposed penalties totaled \$652,502.*



## **"NON-COM"® Fire Protected Lumber and Plywood**

Non-combustible wood to control and contain fire. Rated by Underwriters Laboratories, Inc.

## **"WOLMAN"® SALTS CCA-C** Ageless, best for ground contact

Licensee of KOPPERS COMPANY, INC.  
Operating Three Pressure Treating Cylinders

## **G. M. STEWART WHOLESALE LUMBER & TREATING CO.**

THE UPPER MIDWEST'S LARGEST YARD

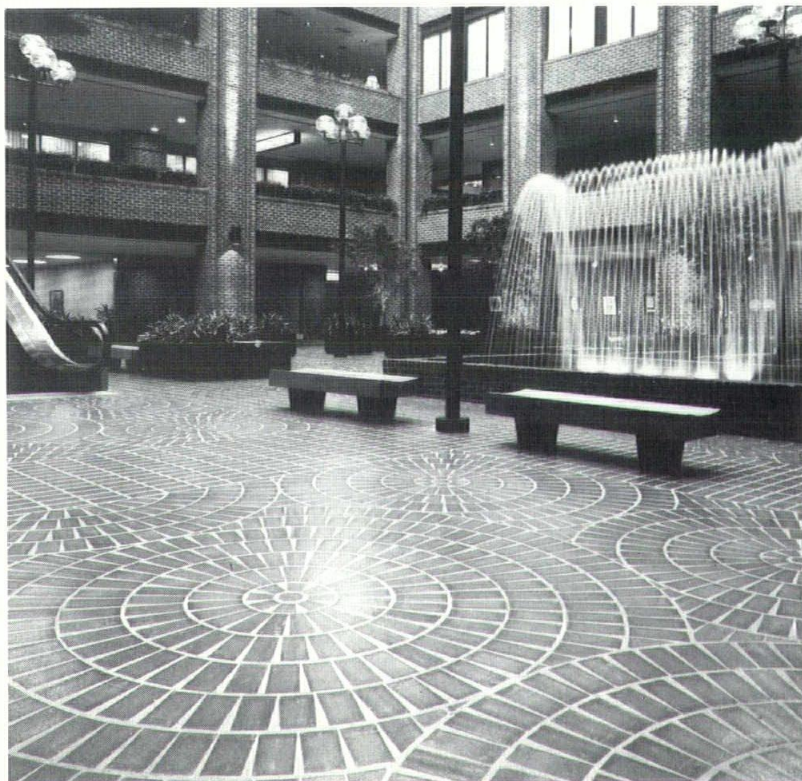
Phones: 378-1520 — 331-5543

421 JOHNSON STREET N. E.

MINNEAPOLIS, MINN. 55413



## Twin City Tile and Marble Company



Designed by Baker & Assoc., Inc.

**Twin City Federal Savings and Loan**  
801 Marquette Ave., Minneapolis

Installation of Intrastado Paver Floor tile in the Atrium of the New Addition. The beauty of this floor reflects the quality of material and skilled workmanship provided.

**Twin City Tile and Marble Company**

219 EAST ISLAND AVENUE, MINNEAPOLIS, MINNESOTA 55401

Telephone (612) 332-8785

*A propos the Above . . .*

*When the Labor Department inspected the 11-story building in Washington, DC, that houses the Occupational Safety and Health Administration (OSHA) guess what it found? Over 300 hazardous conditions, such as unlighted stairways, faulty fire extinguishers and a room that could be locked from the outside and imprison the occupants. OSHA, of course, is the agency that's been sending inspectors around to other businesses and citing them for just such offenses.*

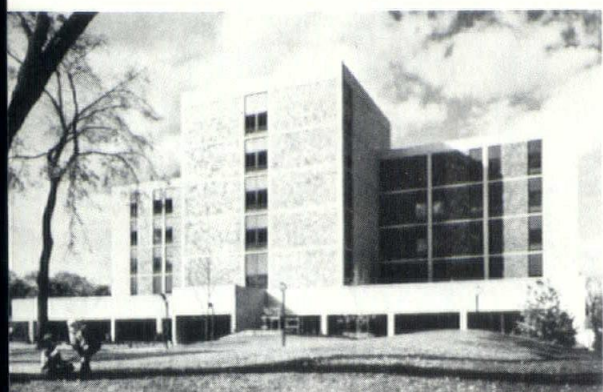
The Minneapolis Builders Exchange has just concluded a successful and somewhat unique fund raising program for the purchase of the building which has been leased for nearly 15 years. Promissory notes paying interest of 8% were issued to Exchange members. This resulted in more economical financing than could have been obtained with a mortgage.

A new 5 story building located on a 30 acre site on Highway 55 and County Road 18 in Plymouth is now serving as the headquarters for S.J. Groves & Sons Company, one of the nation's largest contracting firms. Architects for the building were McEnary, Krafft, Birch & Kilgore, Inc. of Minneapolis.

What is the present status of metric conversion? The 1975 Congress passed a resolution instructing the National Bureau of Standards to prepare a plan for the switch over. Do you expect to live to see it happen? Paul Heinemen, writing in "SpecNews", a publication of the Baltimore Chapter, CSI, makes it clear that any change will have to be compulsory. One paragraph from his editorial is as follows:

*Will we ever switch? Actually, as far as voluntary compliance goes, the use of metric units has had Federal approval since 1866 when Congress declared that it is "lawful throughout the United States of America to employ the weights and measures of the metric system in all contract deal-*





## Pella Clad windows are for children.

At the Children's Health Center & Hospital in Minneapolis, a Pella Clad Window System combines the insulating qualities and natural beauty of wood windows with an acrylic color coated aluminum skin. Pella Clad Wood Windows. The natural choice in low maintenance window systems.



Architect: Ellerbe Architects/Engineers/Planners, Contractor: Borson Building Corporation



# YOU CAN COVER A BUILDING WITH ANYTHING.

*Is It Worth Your Effort  
to Look at a  
**PRESTRESSED CONCRETE COVER?***



## REYNOLDS WHOLESALE COMPANY

ARCHITECT: Weichselbaum HSR & Associates, Inc., Rochester, Minnesota  
GENERAL CONTRACTOR: Paul S. Gray Construction Co., Faribault, Minnesota

The Reynolds Wholesale Company thought so for their 46,000 square foot operation in Rochester, Minnesota. They found that insulated prestressed concrete wall panels answered their need for an attractive yet economical wall that has durability, fire resistance and a high degree of insulation.

Make the effort to check by simply calling us and we'll furnish you with pictures. We'll provide details. We'll study the project with several solutions. We'll tell you what the cover will cost and we'll back up our estimate at bid time.



BOX 37, WELLS, MINN. 56097 - PHONE (507) 553-3138



ings or court proceedings." The effectiveness of voluntary switchover can be measured by the formula:

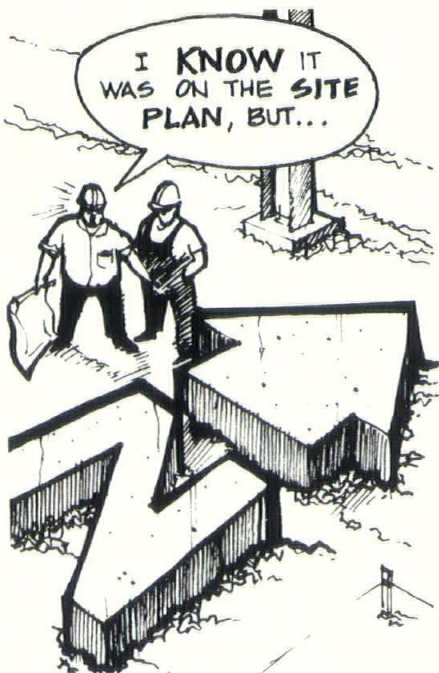
$$\frac{f_e}{P-1866}$$

where  $f_e$  = frequency with which one encounters metric today, today, and  $P$  = this year, expressed in Anno Domini units.

Congratulations to Grazzini Bros. & Company, tile and terrazzo contracting firm of Minneapolis. They are now celebrating their 50th year in business.

Recent surveys by Dun and Bradstreet provide guide lines for subcontractors in measuring the relationship between sales and credit. They suggest that on the average, sales should be at least six times current receivables while some of the more successful firms turn sales volume up to 20 times current receivables. This all points up **again** that sales and credit policies cannot be separated if business is to prosper.

Retainage is a frequent subject of conversation among members of the construction team. Arizona law now permits retained funds to earn interest with the proceeds going to the general contractor. This is an interesting alternative to progressively reduced percentages. □



From the "Recker Reader" publication of the School of Architecture, University of Illinois.



# Maplewood Mall

Contractors for Floors—Walls—Roof Decks

## Grazzini Bros.

& COMPANY

Celebrating our 50th Anniversary

620 SIXTEENTH AVENUE SOUTH

MINNEAPOLIS, MINNESOTA 55454

TELEPHONE (612) 336-7735



# As architects, you have more to plan with, using Herman Miller's Action Office.

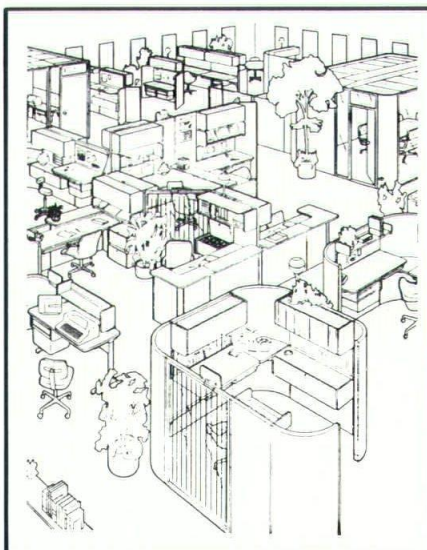


The pleasing open environment of Action Office gives room to get the job done, without sacrificing privacy. At the same time, communication is smooth and easy.

The most versatile concept in office planning is available to you and your clients from **General Office Products Company** of Minneapolis. It's Action Office, developed by Herman Miller. The idea is simple—a free standing panel system with an almost infinite variety of storage, work surface and filing components that are mounted on the panels themselves. It's proven to be ideal for all kinds of business needs.

Because Action Office uses vertical space more efficiently, you can conservatively save your

clients 10% to 30% in floor space. Second, because the units are free standing and readily changed, expansion requirements often can be planned with no additional costs in dry wall construction.



Overview of a modular Action Office.

Remember, too, that the functional environment created with the Herman Miller system will harmonize with your over-all design.

So, find out more about Herman Miller's Action Office. Write us. Our sales people and designers can help you with your specifications. Write **General Office Products Co.**, 4521 Highway Seven, Minneapolis, Minnesota 55416. Attn. Jim Dorr, Vice President Sales and Marketing. Or call (612) 920-7171.



Representing the most discriminating manufacturers.



# NELSON



# EAMES



# GIRARD



# PROBST



## THE DESIGN PROCESS AT HERMAN MILLER

The first group presentation of furniture, fabrics and interior architectural systems designed by George Nelson, Charles and Ray Eames, Alexander Girard and Robert Propst, opened at Walker Art Center in Minneapolis on November 25, and continues through January 18. These architects and designers established a collaboration that has lasted nearly 30 years with Herman Miller, Inc., of Zeeland, Michigan, a company that, until the late 30s, manufactured reproductions of period furniture. An atmosphere of experimentation generated by the firm's management attracted these designers and encouraged the development of objects which have become classics of mid-20th century design.

Nelson, who was appointed design director for Herman Miller in 1945, was initially known for his storage wall designs and Executive Office Group. Charles and Ray Eames began designing for Herman Miller the following year. The famous Eames molded plywood chair, produced by Herman Miller in 1946, has become an international symbol of modernity. Such Eames designs as fiberglass stacking chairs, rosewood lounge chair and ottoman, and tandem seating units installed in airport terminals throughout the world are almost as well-known. Girard, a specialist in fabric design, came to Herman Miller in 1952. Last to join the group in the late 50s, Robert Propst has developed interchangeable furniture components known as Action Office and Co/Struc. Action Office was the first successful American office

landscape system, and since its introduction in 1964, many companies have put similar systems into production. Co/Struc is an inventive system of highly mobile containers, frames, counters and carts used to expedite service functions in hospitals.

This exhibition, organized by Walker Art Center, constitutes a "case study" of post-World War II industrial design. On view are over 100 examples of objects — chairs, tables, storage units, systems components, fabrics — including many prototypes and some designs that are no longer in production. Large-scale photographs and color projections documenting the sophisticated, innovative design and manufacturing process at Herman Miller are shown in juxtaposition with objects.

The interest and talents of Nelson, Girard, Propst and the Eameses extend beyond producing their industrial designs. They are also involved with issues of education and environment. Nelson became an associate editor of *Architectural Forum* in 1943. His book, *Problems of Design*, published in 1957, is still the definitive work on the subject and his ideas have seriously influenced American design education.

Long committed to the concept of mass communication, Charles and Ray Eames have produced multiple-screen programs on aspects of American life shown in the 1959 United States exhibition in Moscow and for the IBM pavilion they designed at the 1964 New York World's Fair. Their current documentary effort is a large-scale





**THE EUCLID CHEMICAL COMPANY**

Chemists to the Building Industry  
since 1910



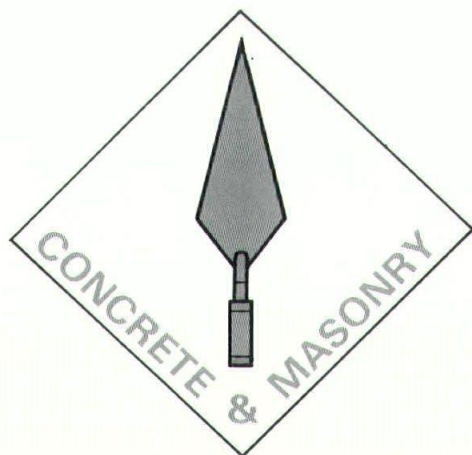
### 3 Concrete

Admixtures  
Bonding Agents  
Curing Compounds  
Epoxy Materials  
Hardeners  
Non-Shrink Grouts  
Patching Compounds



### 4 Masonry

Mortar Admixtures  
Water Repellent Coatings



**SNOW-LARSON, INC.**  
CONSTRUCTION MATERIALS

1221 No. Second Ave., Minneapolis, Minn. 55405  
(612) 374-1216

Bicentennial exhibition on the lives of Benjamin Franklin and Thomas Jefferson, which was premiered at the Grand Palais in Paris last spring and will soon be seen at the Metropolitan Museum of Art in New York. Their films on computer theory, mathematics and communications are distinguished as much for great wit and careful research as for their aesthetic quality.

Alexander Girard, educated as an architect in London, has assembled a vast folk art collection, much of it from New Mexico, that often inspires the images in his work. He has produced several major design exhibitions for The Museum of Modern Art. Girard's inventive use of fabrics as room dividers and as surfaces specifically intended for the clean forms of modern furniture reflects his architectural background.

Robert Propst is essentially an inventor and theorist. The structural units he has designed for Herman Miller are mutually dependent and, utilized in various combinations, provide environments with almost unlimited adaptability to changing spaces and situations. His contribution indicates a broadening of the Herman Miller philosophy from design of a single object to a "systems" environmental approach.

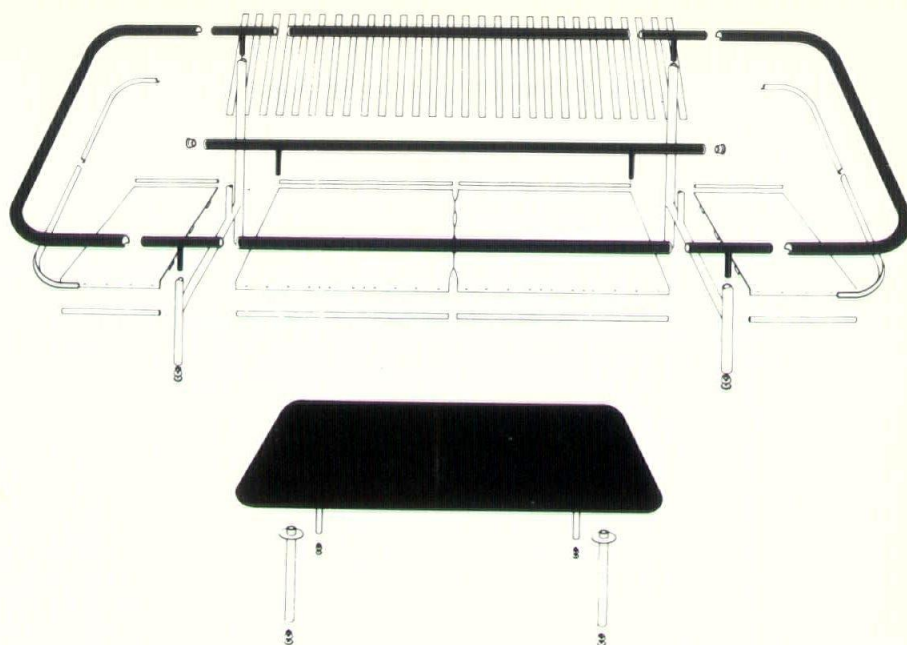
*Design Quarter 98/99* serves as the exhibition catalogue. Illustrated in color and black and white, it contains essays by Olga Gueft, Esther McCoy, Jack Lenor Larsen and Ralph Caplan — writers and critics who are authorities on the designers in the exhibition.

The accompanying excerpts are reprinted from *Design Quarterly 98/99* which is available from Walker Art Center, Minneapolis.

After its presentation at Walker Art Center, the exhibition will travel to several other museums, including the Milwaukee Art Center; the Detroit Institute of Arts; Museum of Art, Carnegie Institute, Pittsburgh; and the Institute of Contemporary Art, Boston. □



Chrome steel tubing chemically bonded with epoxy resins forms a frame for the 1964 Sling Sofa. Its leather seat cushions are supported by a molded neoprene (rubber) sheet stretched inside the frame. Back cushions are supported by neoprene straps.



## WHAT IS GOING ON

George Nelson

Timing has a lot to do with the way things happen.

At the end of the war, Herman Miller was a tiny company with a modest factory in Zeeland, Michigan and a chronic cash problem. This company had decided some years earlier to confine its production to modern designs, an admirable but premature decision . . . .

By normal standards, in a society fervently dedicated to the numbers on the bottom line, Herman Miller was peculiar, not so much because it was small, but because it was dedicated to manufacturing modern furniture for *moral* reasons. Gilbert Rohde, a pioneer industrial designer, had convinced D.J. De Pree, head of Herman Miller, that it was dishonest to manufacture period reproductions. De Pree, a deeply religious man committed to carrying his beliefs into everything he did, accepted Rohde's arguments and in the mid-30s switched production to pieces representing what he and Rohde considered "honest" design. The decision, as I said earlier, was close to disastrous, but it made possible all the very good things that happened later . . . .

So what we see in this exhibition is the result of a very odd mix of faith, design and technology, an evolution covering roughly three decades, within a setting of massive social transformations . . . .

Modern furniture, of course, goes back more than three decades. Passing over the question of whether Art Nouveau was "modern" or not, and putting aside the interesting work of English, Dutch and Austrian designers before the 20s, we have only to recall the brilliant work of architects-turned-designers in the 1925-35 decade. The pieces by Aalto, Mies, Breuer and Le Corbusier were prophetic and inspired. We must also keep in mind that they were not

designed for a "market" but to play a role within specific buildings. This probably does more to explain the continuing freshness of their designs than any other factor . . . .

The end of the war brought with it a set of attitudes that might be described as "moralistic." There was a general feeling that the past had to be swept away and the world changed, somehow, into a better place. There was no need to go looking for reasons: the slaughter of some 20 million people plus the horrors of the Nazi camps were enough. With these feelings came a rather naive belief that ethical behavior (usually understood as doing something for "the people") and good design were the same. There was no basis whatever, historically or philosophically, for such a notion, but it did generate a lot of energy.

Along with the postwar yearnings for a new innocence and simplicity, often reflected in furniture that reached for a primitive quality but achieved, as often as not, a fair degree of sophistication, there was also a strong undercurrent of excitement about new technology. When the Italians finally surfaced at the Milan Triennale of 1951 after several decades of invisibility, the promise of new technology was expressed in almost operatic style. This was the first major international "design explosion" since the earlier work at Miller and Knoll came into view, and it marked the emergence of a real competitor for first place in the global design sweepstakes . . . .

Like everything technology is responsible for these days, new problems seem to spring up on the heels of new solutions. In the case of office systems much of the depersonalization, anonymity and alienation we have come to associate with big enterprises are so pervasive that the designer's work cannot remain unaffected. But in the 70s, things are changing again. We are all caught in a web of multiple crises, former sacred cows like science and technology are no longer perceived as infallible, and all big institutions, whether public or private, are being viewed with feelings ranging from uneasiness to outright hostility.

Trying to view the scene overall, we get a mass of signals indicating that a metamorphosis of extraordinary dimensions is going on, and that all social structures are being affected. In simple terms, there is a shift from an essentially materialistic value system to one in which other, more human values predominate. There is any amount of documentation to support the view that millions of people today, here and in the other industrial countries, find their work meaningless and degrading. Rebellion takes many forms: independence versus dependence; a search for meaning at the individual level; a resurgence of bicycling, hiking, gardening, home canning; a new interest in oriental philosophies. Smallness, the manageable, human-scale enterprise, suddenly become attractive again and books like Schumacher's *Small is Beautiful* or Pirsig's *Zen and the Art of Motorcycle Maintenance* find broad readership . . . .

A reasonable conjecture as to what is going on is that there is an emerging distinction in the consumer's mind between possessions and *tools*. The difference is that a possession tends to enhance status, while a tool enhances existence. A tool promotes skills and personal growth. A possession just sits there to be admired. In this sense, a camera, amplifier, tape deck, bicycle, mountain tent, tennis racket are tools. The value and benefits are built into the use, not the ownership.

And what does this have to do with furniture designs? I think it may possibly have to do with the distinction just made. Corporate furniture will probably not change very much; certainly any perceived threat to the corporation or its structure will merely rigidize and intensify existing attitudes. To the extent corporate leaders perceive and accept a new social role, one would guess that interiors and furniture would reflect the humanizing influence in that role. As far as domestic furniture goes, the idea that it may be seen as a kind of tool for the real enhancement of living is anything but distasteful. In such an event one might imagine that the least of its qualities would include, to use the ancient phrase, "commodity, fitness and delight." □



# H.A. Rogers co.

DIVISION OF THORPE INVESTMENT

2323 WAYZATA BOULEVARD • MINNEAPOLIS, MINNESOTA 55405

612/377-4870

MEMBER **miniMax** INTERNATIONAL

CURRENTLY AVAILABLE IN THE CITIES LISTED ON THE LEFT

## THE SYSTEM OF REPRODRAFTING

Chicago  
Houston  
Denver  
Austin  
Tulsa  
Dallas  
Montreal  
Detroit  
Davenport  
Toronto  
Lansing  
Omaha  
Honolulu  
Peoria  
Atlanta  
Vancouver  
Minneapolis  
Philadelphia  
St. Louis  
Pittsburgh  
Newark  
Dayton

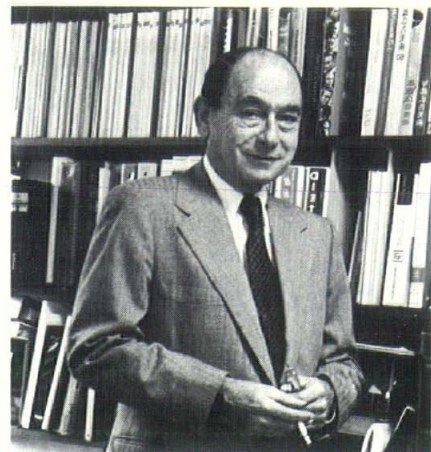
### Pin Registration:

- Cost Savings
- Time Savings
- Flexibility
- Communication

ARCHITURAL • ENGINEERING • DRAFTING  
SUPPLIES AND EQUIPMENT

## GEORGE NELSON

Olga Gueft



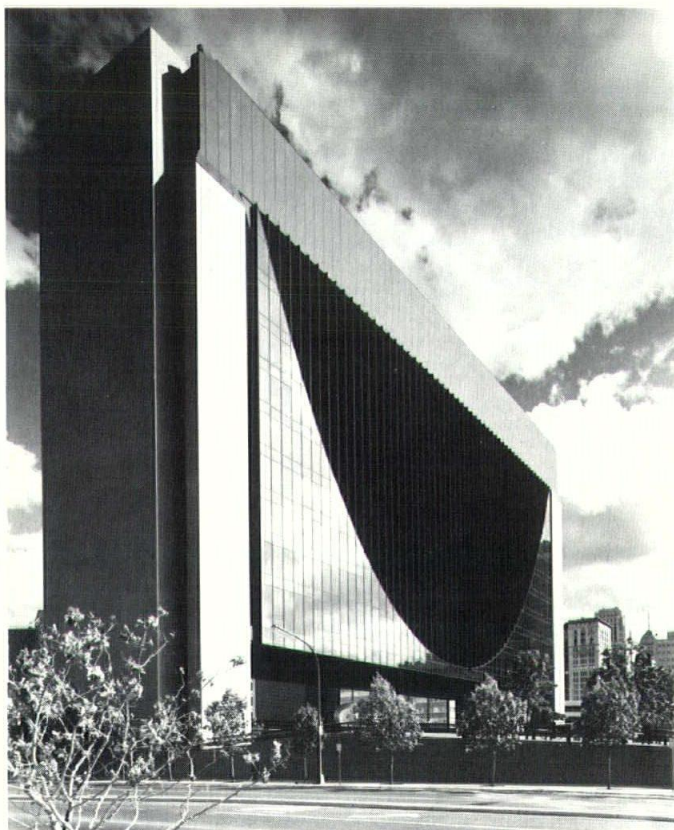
George Nelson played a decisive role in the development of the Herman Miller company. The Herman Miller company played a decisive role in the development of furniture as a pervasive artifact of the modern lifestyle, and as an instrument integral to the modern working environment . . .

Certain facts are clear: Nelson was, chronologically speaking, the first of the group (Nelson, Eames, Girard, Propst) to work with the company. And it was he who brought in the second, Eames — friend, crony and kindred soul who shared many of his attitudes and beliefs about design. Nelson was also the strategist who molded the Herman Miller image, conceiving and designing advertising, graphics, catalogues — including the famous Herman Miller "M," first made as a plywood cutout. During the early years he designed many of the Herman Miller showrooms. As a mentor he gave the De Prees some very valuable advice: "If you can't afford advertising, you should produce a few products that will get into all the magazines because they're odd or crazy." He invested the advertising budget — when at last there was one — into striking full-page advertisements even if this meant fewer insertions. It was also Nelson who verbalized De Pree's credo of integrity — Calvinist uprightness translated into company policy — carrying the word to the press as a writer, editor and charismatic interviewee.

It is ironic that as an image-maker, Nelson established the Herman Miller identity much more firmly than his own. His contributions to the modern movement were original breakthroughs of much deeper import than his public relations activities for Herman Miller.

Nelson belongs to the "lost generation" of architects who emerged from academia at a rather inauspicious time — when building was frozen, first by the Great Depression and, several years later, by World War II. He went to Yale and, for postgraduate train-

*Comprehensive Storage System (CSS) was a 1950 version of the earlier Omni system. CSS accepted connectors on two sides and worked either with floor to ceiling pressure support or as a wall-hung system. This photograph includes lighting units designed for the system and a number of its unnumberable storage elements.*



SAARI & FORBES  
PHOTOGRAPHY

architectural photography

(612) 636-8292







# CALL SPANCRETE!

Give us an opportunity  
to earn your business.

We want to assist you  
with preliminary design  
problems, delivery  
schedules, specifications,  
and budget or firm  
prices. We offer a  
complete line of  
precast components,  
beam columns, hollow  
core plank, double tees,  
and Tomax wall panels.

612-425-5555

## SPANCRETE MIDWEST COMPANY

P.O. Box AA

Osseo, Minnesota 55369 (612) 425-5555

ing, to Catholic University, winning a *Prix de Rome* along with his diploma. The year was 1932 and the prize staked him to two years of travel and study in Europe. What he discovered there, in addition to the treasures of the past, was the modern movement in architecture. He capped his observations by interviewing as many of the pioneers of that movement as he could, with Le Corbusier at the head of the list . . .

When World War II clamped down on building, Nelson compensated by writing more. In the mid-40s he turned out two books, *The Industrial Architecture of Albert Kahn*, and, with Henry Wright, *Tomorrow's House*. If he couldn't design houses that would get built, at least he could explore ideas of how people might live in houses.

One of those ideas was stimulating enough to be translated into a tangible prototype, the Storagewall, which *Life* published in 1945 in conjunction with an exhibition at Macy's New York department store. It was an answer to a growing problem: as the proliferation of gadgets and belongings in an increasingly affluent society was saddling people with more and more things to store, building costs were resulting in smaller rooms and reduced space for storage furniture. It occurred to Nelson that since most walls were about six inches thick, and most household objects could be stored in depths of ten inches or less, an immense amount of orderly storage could be accommodated by replacing fixed solid walls with partitions consisting of connected storage components including shelves, cabinets and drawers. He also reasoned that if the components were modular, they could be combined in accordance with whatever the user wanted to store, and placed anywhere that the user wanted a wall. And that both the components and the position could be changed as needs changed.

The Storagewall assumed the functions of movable furniture ranging from armoires and breakfronts to the smallest bookstand, and many of the functions of fixed architectural features as walls, closets and partitions.

It is impossible to overestimate the importance of the ideas germinated by the Storagewall. It showed the possibilities inherent in interchanging furniture and architectural elements. It suggested the possibilities of flexibility, i.e. continuous

(Continued on page 32)





## CHARLES AND RAY EAMES

Esther McCoy

From the beginning of the century, mass production was the golden fleece of design. As the century advanced, the body of literature and the body of faith increased, also the number of notable deaths. The world that could support the Model T killed off the Franklin. We deal here with Franklins.

Had Charles Eames been born half a generation earlier (into that of Alvar Aalto and Le Corbusier) or even a quarter of a generation (that of Marcel Breuer and Konrad Wachsmann) he would have encountered few men of conviction. For, as George Nelson wrote in the first Herman Miller catalogue, "A good thing about having convictions is that one tends to act on them."

In this light I understood the poignancy of Breuer's comment on Eames: "From the first, he has been in production without a single break." And Wachsmann's: "A fantastic opportunity." They were the ones who can (Emily Dickinson's expression)

"Tell the definition . . . of victory." . . .

The Museum of Modern Art's Organic Design show, where Eames first received recognition, was in the *Ich Dienst* spirit of the 30s; the purpose was not simply to single out the best entries for awards, but to find furniture which in addition could be machine produced at a reasonable cost. Moreover, when produced it was to be sold at selected shops or department stores across the country. The geographic spread was very important because basic to the idealism of the 30s was the tent that benefits should be widely shared. The furniture, according to the Museum, should "... reflect today's social, economic, technological and aesthetic tendencies;" it was to "... provide adequately and handsomely for a typical American middle-income group family." The eye was on the sparrow.

Eames and Saarinen, then at Cranbrook Academy, entered pieces in all the categories. The most memorable entry was a molded plywood chair — the first version of the most famous chair of the century. Marcel Breuer, one of the jurors, recalled in 1973 that he was "very positive" about the choice of the Eames-Saarinen entries in two categories for top place. Looking back from a distance

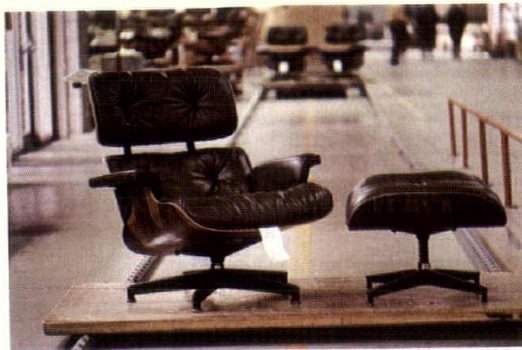
Eames's first true lounge chair (above) a very personal version of the English club chair and ottoman, is made of molded rosewood plywood and black, down-filled leather cushions, on a polished aluminum swivel base.

of 33 years, he summed up: "Plywood had been used before; I had used metal. There was nothing new in the lightness or the materials, but what was new was that he had pushed his design into industrial production."

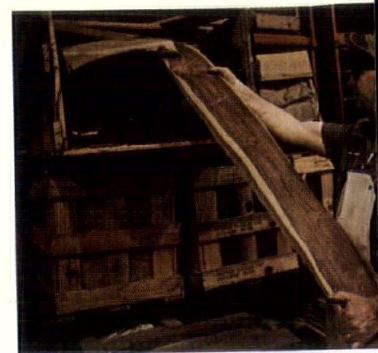
The statement touches the quick but it leaps over the six years between the awards and the time in 1946 when Herman Miller took over the production of the Eames chair. That is to say, a move to California and a war occurred; there was the trial and error of building production tools for the molded plywood pieces, the endless hard work in preparation for mass production. Then Herman Miller carried the operation out of experimental mass production into true mass production. There is a lifeline that saved the early Eames chairs from becoming collectors' items and has kept them in production today: mass distribution . . .

(Continued on page 41)

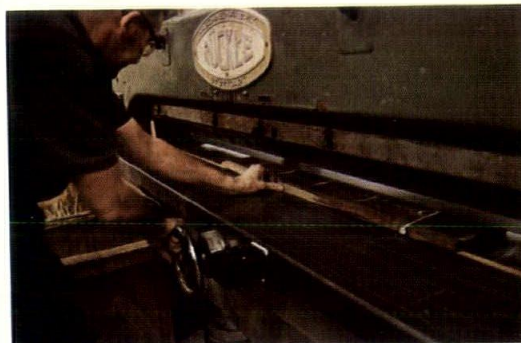




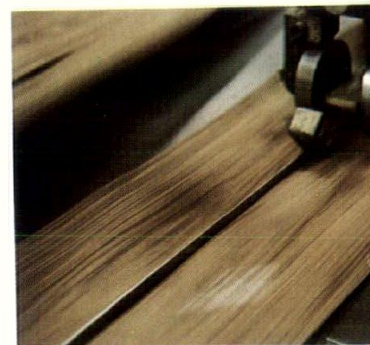
1



2



3



4

*Manufacture of the Eames Lounge Chair and Ottoman has evolved over the years — it was introduced in 1956 — until it is now a very refined process. As evident in these photographs, much of the work is still accomplished by hand. Though the chair has remained basically the same in appearance, there have been subtle changes and improvements in its parts, and in the machines that help to produce them. The leather covering and the cushion filling have also been modified. Eames and the production engineers continuously reassess products. Working together, they often make changes in a material or a form.*



5

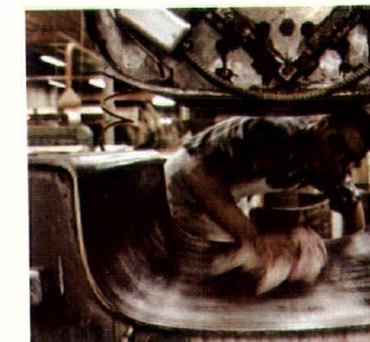


6

*In abbreviated form, the Lounge Chair's production sequence is shown on this and the next page: 1) A completed chair and ottoman on the way to final inspection; 2) A chair's manufacture begins with selection of a rosewood flitch (sheets of wood veneer cut from the longitudinal section of a single log, laid together in sequence); 3-5) Veneer is sized, trimmed, glued and taped together to form sheets large enough to make the chair's back, seat and ottoman frame; 6) Glued sheets of veneer are hung to dry overnight; 7-10) The hot press (a match metal die) forms the wood sections by activating the dry glue so that it joins sheets of veneer and takes the final curved form that is identical for the seat, back and ottoman; 11, 12) These five-ply forms are then numbered and cut into accurate chair elements; 13-15) Sanding is accomplished by hand and machine; 17) Neoprene shock mounts are glued to the plywood forms, ready for attachment to the metal bases and back supports; 18) Wood is oil finished by hand; 19) Filling for the leather cushions that are hand cut and sewn. Cushions are attached to the chair with snaps set into the wood frame and can be replaced simply by snapping in a new element; 20) Wood edges of the five plywood sheets are exposed.*



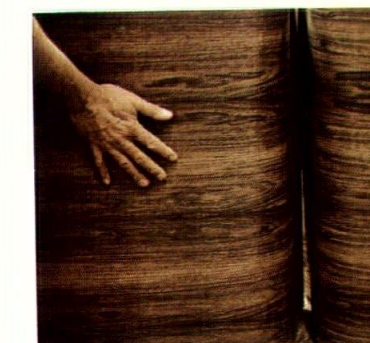
7



8

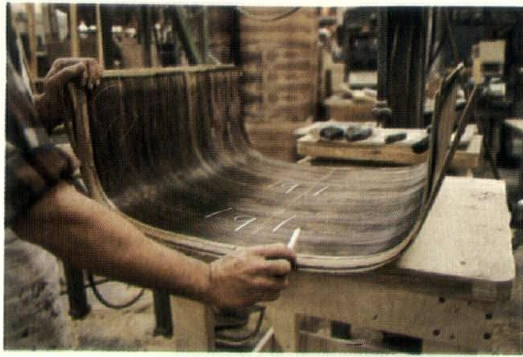


9



10





11



12



13



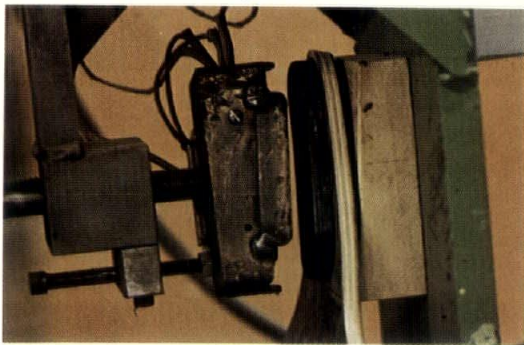
14



15



16



17



18



19



20





## ALEXANDER GIRARD

Jack Lenor Larsen

Alexander Girard is one of the great colorists, pattern givers, environmental and exhibition designers of our time. These media — his joy in them and ours — is his message. Girard's statement is based upon an underlying personal humanism expressed through color and pattern, folk art and total design. He calls for spontaneity and for a fresh consideration of emotional content, for easy, fun filled simplicity in which a good replenishing environment is not a matter of size and cost, but of the integrity of its parts. He has never implied that everyone should live with the hallmarks of his style, but — through ample demonstrations — he has urged each of us toward a more personal and expressive way of life.

Girard's unique position in 20th century design is based in part on the fact that fabric design is only one aspect of his expression. More than most of us in fabric design, he is aware that the role of fabric is a supporting one. That Girard is an interior architect of great stature has influenced his fabric design in a variety of ways. First of all, architectural commissions have presented the challenge of fresh requirements — far beyond the conventions of a fabric collection *per se*. Often these commissions have provided the impetus for a bold de-

parture in Herman Miller's fabric line. Girard's interiors, widely published, are often perfectly orchestrated demonstrations of how to use his fabrics effectively.

As his own best client for fabrics, Girard describes the genesis of his cloths and colorings:

The simple geometric patterns and brilliant primary color ranges came to be because of my own urgent need for them on current projects. As you will remember, primary colors were frowned upon in those days; so were geometric patterns. I had the notion then, and still do, that any form of representational pattern, when used on folded or draped fabric, became disturbingly distorted, and that, therefore, a geometric pattern was more appropriate for a draped fabric. Also, I was against the concept that certain fabrics were 'suited' to certain specific uses — like pink for girls or blue for boys!

Their wide availability was assured as Herman Miller put them into their collection — in a variety of cloth types. Most often these enriched colors and concise patterns went into the Miller collection "use tested" by Girard's interior and exhibition assignments. Later on, for easy correlation by a broader, international Miller staff and client list, the Girard color schemes and pattern complexes became highly systematized.

*Herman Miller's San Francisco showroom, a turn-of-the-century music hall, was transformed in 1959 by Girard who retained most of the original architecture. Decorative and witty, the space created an appropriate envelope for Girard's folk toys and fabrics. Girard's ability to work in several disciplines—architecture, graphic design, fabric design—is a characteristic of a number of designers of his generation, including Eames and Nelson. La Fonda del Sol was an example of Girard's total design ability (opposite). A Latin American-inspired restaurant (now closed), it was designed by Girard from the menus and matchbooks to the tile walls and floors. The La Fonda chair was designed by Charles Eames.*

For almost two decades Girard's designs for Miller included selections from his famous Mexicotton series. His endless variations on related stripes, checks and solids primarily within the confines of one weave, one yarn and one density prove his innovative prowess. Such exercises often stultify; Girard responded to this discipline as do great poets to the structure of the sonnet form. On more than one occasion, as in his installations for The Detroit Institute of Arts, The Museum of Modern Art and Georg Jensen, he has also been the designer for exhibitions that featured his fabric designs.

*(Continued on page 43)*









## ROBERT PROBST

Ralph Caplan

Organizational life can't stand environments that confer nothing but status, in which you can't do anything but pose. The healthy organizational effect washes all the baloney away.

Robert Propst

Although he is a sculptor, painter and former art teacher, Robert Propst produces work that looks consistently out of place in a museum of art. His designs are not collector's items. Individually they are not even items exactly, and in the aggregate they do not comprise a collection. Rather they are components of a system.

It is difficult to admire these designs for their appearance. It is difficult, for that matter, even to say precisely what their appearance *is*, for it keeps changing. The skeletal members of a process, Propst's designs are finally indistinguishable from the activities they support.

His best known products are a system of office equipment called Action Office and a related system of hospital equipment called Co/Struc, both manufactured and sold by Herman Miller Inc. But Propst's work also includes a vertical timber harvester that can slice up four trees a minute; a system for machine-readable tagging of livestock; a pediatric bed; a mobile office for a quadriplegic lawyer; a program for making university dormitories inviting centers for student life; reducing vandalism in the process; a system of integrated information-handling accessories; a facility system for a corporation's warehousing, transportation, inventory management and laboratories; a study of the social and economic ramifications of single-use products; the conversion of an old university building into a more responsive instructional facility; the "fishbone connector," a device for making invisible joints in furniture assembly.

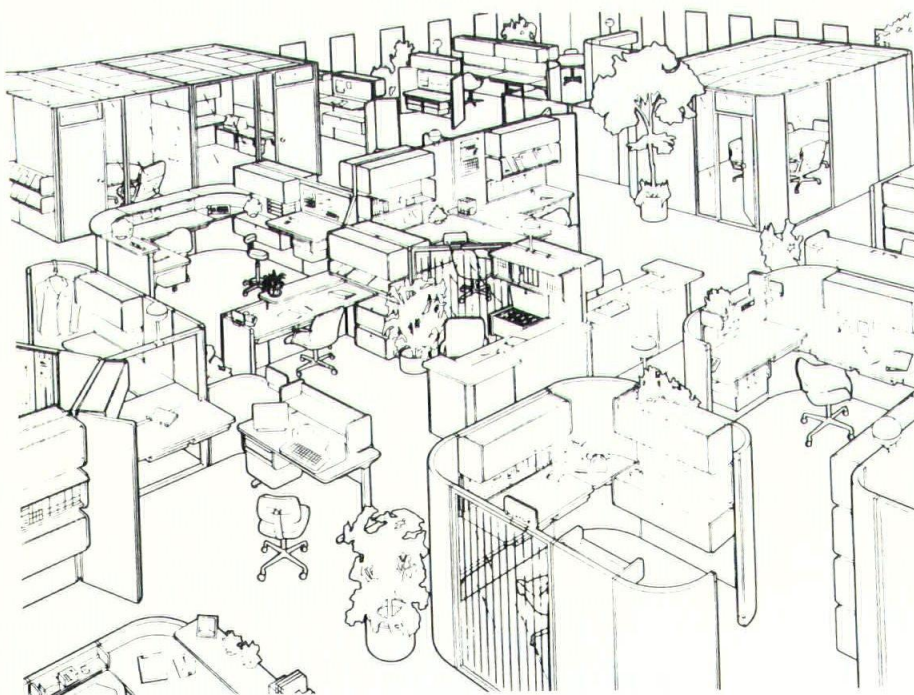
Propst is president of the Herman Miller Research Corporation. Much of the corporation's work is related to furniture, but from the start it represented a departure from the standard approaches to conventional furniture design. As befits a man who is committed to systems, Propst is almost aggressively uninterested in piece goods and believes in any case that the piece goods approach is particularly inappropriate to today's problems.

"It doesn't look to me as though this is a period of any vitality at all for piece-design furniture," he says. "If you look at what's coming out, you know you've seen it all again and again. Of course there are a lot of furniture companies across the country who want that for cannon fodder." . . .

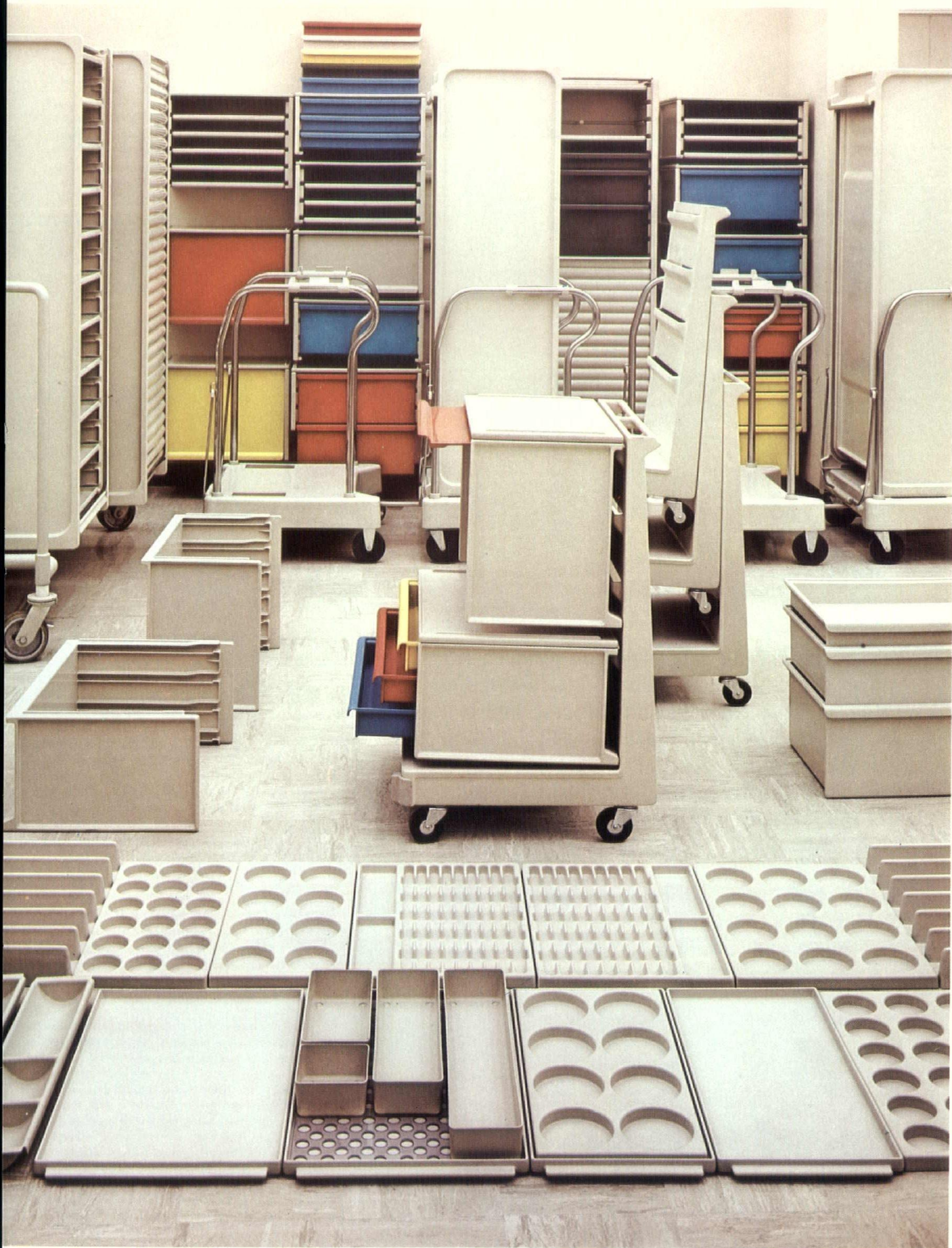
In the mid-50s D.J. De Pree, founder and at that time president of Herman Miller, called on Propst intrigued with the idea of using his innovative talents to extend the

(Continued on page 44)

*Action Office, produced in its current form since 1968, is a furnishing system for offices and other paper handling situations like libraries. Consisting of many small elements, this easily modified series of interdependent parts can be organized in an infinite number of configurations.*

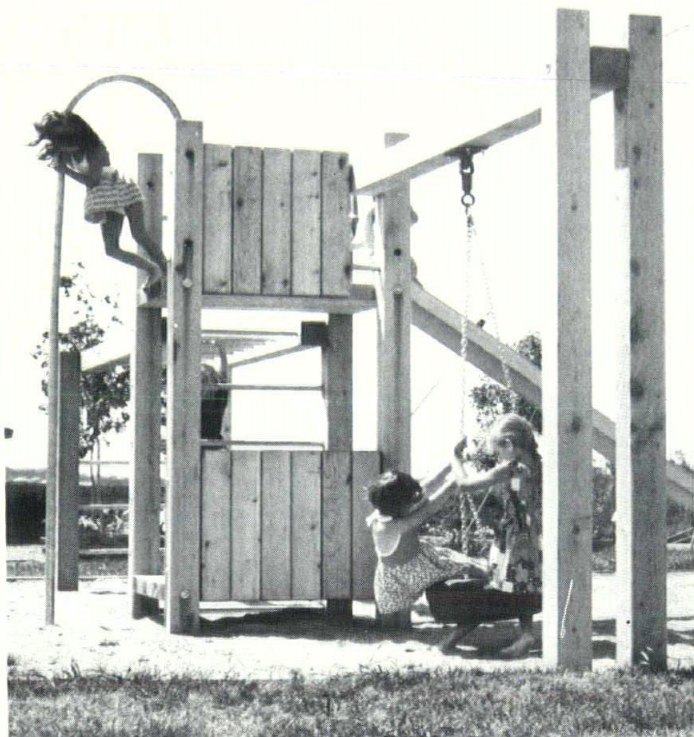








# Our Newest and Our Best



We've beefed up our play components for more durability, yet have maintained the same great form and function. The real plus is the new unique connection system providing more flexibility to again give you the creative freedom for expansion of the system and development of your own concepts.

Write for more information on this 000 Series Park Structures and other prefabricated wood products.

**landscape  
structures inc.**  
delano, minnesota 55328

## NELSON

(Continued from page 24)

changeability. It suggested that neither furniture nor architectural elements need be bought whole, and that they themselves can be stocked compactly — often flat — and sold as components. All open plan systems are derived from the possibilities generated by Nelson in that 1945 *Life* spread . . .



Nelson's books include *Chairs*, *Display* and *Problems of Design*. Among his more significant articles: "After the Modern House" (July 1952 *Interiors*) suggested using anonymous factory-shell or space-frame buildings converted to special purposes with special-purpose fittings — a precursor of the open plan concept which uses huge unpartitioned floors; "Grass on Main Street," (1942) was an early version of the ubiquitous pedestrian mall idea — Nelson was blowing the whistle on the automobile before anybody else; "The Hidden City" (January/February 1975 *Architecture Plus*) suggests the earth berm as a device to unclutter the urban landscape . . .

At the start of his association with Herman Miller, Nelson was unpretentiously performing a yeoman service for a small manufacturer. That this manufacturer could later support ambitious research and development programs is in part due to Nelson's dedication and energy, as well as to his enormously innovative concepts. The designers whom he pulled into the Herman Miller orbit — from then on to cross fertilize and stimulate each other's work — were to enjoy the luxury of working slowly and refining their ideas, simply because Nelson hustled and bustled in every possible direction at the beginning, meeting the deadlines of the market with the simple facilities available at the time. He put the show on the road . . .





## Look for Ceramic Tile under **Water**

Mountains or foyers...lobbies or lavatories, walls or walkways, ceramic tile won't absorb moisture, won't warp or buckle. Available in a broad spectrum of true-or-life colors, ceramic tile needs no sealants or waxes, comes clean with soap and water. And, when properly specified and installed, ceramic tile outlasts the structures it serves.

So, "look for ceramic tile under WATER," or just about *anyplace else* where beauty, minimum maintenance and permanence are desired.



old as history... modern as tomorrow  
**MINNESOTA CERAMIC TILE INDUSTRY**



# A GUIDE TO THE ARCHITECTURE OF MINNESOTA

TO BE PUBLISHED IN THE SPRING OF 1976  
BY THE UNIVERSITY OF MINNESOTA PRESS, MINNEAPOLIS

Much of the social and economic history of the state is revealed in this fascinating guide to the architecture of Minnesota. The authors trace the development of the environment and buildings in all parts of the state from territorial days to the present. Using the book as a guide, Minnesotans and visitors may take interesting architectural tours of the cities and towns, seeing the landmarks with a real understanding of their significance in the local and architectural history.

The authors contrast Minnesota in 1876, at the time of the Centennial, with the state today. They trace the transformation of the landscape from the nineteenth century, with the shifts in architectural modes and fashions and the impact of economic conditions on architecture and planning. The relationship of national changes in architectural styles is related to the architectural images of Minnesota.

Following the general discussion, the book is divided in sections covering architectural points of interest in eight regions of the state: the Twin Cities, the St. Croix River area, Southeast Minnesota, the Minnesota River Valley, Southwest Minnesota, Central Minnesota, the Red River Valley, and the Arrowhead and mining region.

The guide contains more than 2,000 entries, providing information about architectural points of interest in 294 towns and cities of the state. There are approximately 300 illustrations and about 35 maps. Most of the illustrations are reproductions of photographs but some are reproductions of drawings. There is an architectural glossary, and a bibliography suggests further readings.

David Gebhard is director of the art galleries and professor of architectural history at the University of California, Santa Barbara. Tom Martinson is principal planner in the office of the Minneapolis city coordinator. □

## GOVERNOR ESTABLISHES COMMISSION ON ARTS

Governor Wendell Anderson has established the Governor's Commission on the Arts and named Stephen Pflaum, Attorney, Long Lake, as the Chairman. The Governor directed Pflaum to have the Commission evaluate current services provided by the state's arts organizations and what they expect to provide for the next ten years; evaluate the costs of providing these services, both past and present, and compare these costs with those of other states and metropolitan areas; evaluate sources of revenue for arts institutions; and recommend appropriate roles for the private and public sectors in providing necessary revenues.

In setting the function of the Commission, the Governor noted that many Minnesota arts organizations have serious financial problems. The Governor also said the main objective of the Commission should be to improve and increase the opportunity for Minnesotans "to benefit in the future from the tremendous effort that has already been made." □

The new AMERICAN  
NATIONAL BANK  
chose the  
BEAUTY and PERMANENCE of



travertine marble, ceramic tile, quarry tile,  
ceramic tile pavers, and sheared marble  
all furnished and installed by

*Drake Marble Company*

CERAMIC TILE QUARRY TILE MARBLE SLATE

60 PLATO BLVD. ST. PAUL, MN 55107 PHONE: 222-4759

**MODERNIZE YOUR  
BUILDING,  
REDUCE  
MAINTENANCE,  
CUT EXPENSIVE  
HEAT LOSS WITH . . .**

**RUSCO** 

**COLOR KEYED**

Replacement Windows

Double Hung, Horizontal Slider,  
Projected, Window Wall

**MINNESOTA RUSCO INC.**

401 East 78th Street, Minneapolis, Minnesota 55420  
Telephone: 888-3120





# BACK TO THE CITY

Hugh Morgan

"Hey, what are you all doing here?"  
"Looking for our roots."

Dudley Riggs Brave New Workshop's  
Monday Night Company

The Twin Cities satire company, commissioned to observe the second national Back to the City Conference held this past September in Saint Paul seemed to hit the old square iron nail on the head. They suggested those returning to live in the older parts of cities throughout the country were looking for roots in a society of homogeneous social security numbers, corporate jobs, fast food franchises and lifestyle prescriptions.

And conference speaker Dr. Robert Berkhofer, Jr. of the University of Michigan's Social History Department wondered aloud if the Back to the City movement was no more than creation of a new urban middle class commune in the city... defying the bourgeois life of the suburbs.

The Back to the City movement, which has developed particular popularity in the past 10 years, is indeed a search for value in the old on the frontier of the new... particularly among middle income Americans. The movement is centered on individuals who in their professional life and individual tastes are seeking the amenities of the city and investing their own sweat equity in the houses and institutions to make the city a livable place as they see it.

Those individuals have formed alliances of their fellows to broaden residential revival through organizations like Old Town Restorations, Inc., of Saint Paul; Historic Walker's Point in Milwaukee, Wisconsin; Bedford-Syvesant Restoration Corporation in New York and perhaps 100 others.

A pivotal question in the movement is: "Do we decide what we want to happen and accept the consequences, do we simply try to moderate the influences of institutions beyond our own, and do we have any responsibility for others beyond our present interest in preservation?"

In Saint Paul, some 50 of the 370 in attendance in September repre-

sented city planning organizations, showing an increasing awareness within governmental agencies that urban residential and commercial restoration is a timely and practical phenomenon. Historical societies at all levels see the process as an important populist step that supports historic preservation and combines it with contemporary needs for economical shelter, freedom from the commute and capitalization of the assets of city services already existing downtown.

Saint Paul Housing and Redevelopment Director, Edward Helfeld wrote after the conference, "an extraordinarily well run and creative conference... resulting not only in greater understanding of neighborhood preservation, but also a positive image of Saint Paul for visitors."

The weekend conference contained a litany of urban preservation efforts, ranging from official and philosophical proposals to broaden the movement and its appeal, to the experiences of seven cities and a town, to strategies for individual action.

Mr. Everett Ortner, president of Back to the City, Inc., and founder of the New York Brownstone Revival



Committee, proposes city conservation districts to foster the return of middle income people to the cities. His districts, while not historic in strictest terms, would be areas of special visual or architectural interest and location. Those moving into such a district might expect to find city-insured mortgages at a reasonable interest rate that would include property purchase and restoration. The owner would need to live in the district, rather than speculate on its economic return and would give first buy-back rights to a community or city controlled organization.

The Bedford-Stuyvesant New York city experience is worth noting. It is a community of nearly one-half million people, predominantly black, which has made preservation an industry . . . providing elegant houses for a large middle class population and scores of jobs for available people and property.

On another scale, Owatonna, Minnesota is a community of 15,000 which is moving city government into a restored state school in the suburbs of the city, and combining none-the-less, the value of the old with the needs of the new. (See also page 00.)

Strategies, as those offered by Ronald Lee Fleming of Vision, Inc., Cambridge, Mass., suggest peeling off the plastic on main streets throughout the country to reveal the character of earlier architecture and promote the renewal of commercial streets and neighborhood services lost by the city to the suburban shopping center.

Aside from weekend conference sessions, delegates from 27 states met with Minnesota Governor Wendell Anderson at a reception in his Summit Avenue mansion on Friday night and dined the following night in the Historic Hill District of Saint Paul in individual houses. Monday the conferees toured Twin Cities architecture, three Saint Croix River towns, Housing Authority projects, condominium projects, grand old houses and adaptive uses of old structures.

Proceedings of the conference are being published. Copies of the Proceedings of the 1974 meeting held in New York are available from: Back to the City, Inc., 12 East 41st Street, New York, N.Y. 10017. The organization will sponsor a third conference next fall and is building an active national membership from urban reviv-



alists in cities of all sizes throughout the country. □

*Hugh Morgan, chairman of the Back to the City Conference this year, is on the Board of Directors of Old Town Restorations, Inc., Saint Paul, which sponsored the conference. He is a consultant in urban preservation and has written extensively on the renovation and conservation of existing buildings.*

## BRICK / CEMENT / TILE / GYPSUM PRODUCTS

**WE HAVE THE FINEST FACE BRICK, PATIO  
BRICK, FLOOR BRICK, AND PAVERS IN THE  
MIDWEST**

STEEL STUDS AND ACCESSORIES  
FACE BRICK — BUILDING SUPPLIES  
AND SPECIALTIES  
STRUCTURAL GLAZED AND UNGLAZED  
FACING TILE  
CEMENT — LIME — COMMON BRICK  
REFRACTORY MATERIALS  
DRY WALL — THERMO POLYSTYRENE  
RIGID INSULATION  
INTERPACE FRANCISCAN TERRA-GRANDE  
FLOOR AND WALL TILE

**WUNDER-KLEIN  
DONOHUE CO.**

1123 GLENWOOD AVE.  
MPLS., MINN. 55405  
TELEPHONE: 374-5050

**CORNING  
DONOHUE INC.**

1407 MARSHALL AVE.  
ST. PAUL, MINN. 55104  
TELEPHONE: 645-6631

*The  
Early  
American  
Shake  
Shingle*

**FOR COMMERCIAL  
AND RESIDENTIAL  
INSTALLATION**



**NULOOK CORPORATION  
12008 RIVERWOOD DRIVE**

Burnsville, MN 55337  
612-881-4515



... a time to celebrate, to enjoy and to utilize our basic freedoms. Festivities and celebrations are a very special way to enjoy and learn about the past, appreciate the cultural diversity of our people, and contribute to the future.

- ☆ **ART AND ARCHITECTURE** — University of Minnesota Gallery History of Midwestern architecture, painting, sculpture and art culminated by a major 1976 exhibit of restored works.
- ☆ **HISTORICAL DOCUMENTARY** — Lac Qui Parle County From pre-pioneer days to the present, a history in book form.
- ☆ **HERITAGE TREES** — Horticultural Society. Identify and preserve trees of exceptional size, historical significance and cultural meaning.
- ☆ **KTCA LECTURES** — Women Historians of the Midwest. Explores myths and roles of women in the past, present and future.

- ☆ **RENDEZVOUS** — Pike Island. Voyage into the past with a weekend experience featuring primitive encampment, canoe races, historic music, crafts, dances.
- ☆ **FESTIVALS OF NATIONS** — International Institute. Gathering of 80,000 participants to authentically celebrate heritages of over 40 ethnic groups.
- ☆ **LAND OF THE SLEEPING GIANT** — Virginia. Saga in word and song of the heritage of the Mesabi Iron Range.
- ☆ **LANDMARKS FESTIVAL** — St. Paul. A gala ball and heartwarming rejoicing for America's blessings.

... a quality future that begins today by looking ahead to tomorrow. The "Spirit of '76" — the serious consideration of human goals, of ideals — is once more applied.

- ☆ **TOWN MEETING '76** — Institute. One-day town meetings to explore Cultural Affairs and the future. Community goals.
- ☆ **OUROBOROS** — St. Paul. Experimental energy conservation model family home of the future.
- ☆ **FUTURE OF RURAL AMERICA** — Crookston. Five programs on world organization, sociology, education and human production, rural development.
- ☆ **WOMEN'S RESOURCE CENTER** — Rochester. Open to all with special orientation towards women's problems and interests.

## HERITAGE '76

## FESTIVALS USA

## HORIZONS '76

- ☆ **PIONEER VILLAGE CENTER** — Montevideo. Exhibits, sarsaparilla bar and authentic settings.
- ☆ **BLACKS IN MINNESOTA** — Afro-American Cultural Arts Center. Research and exhibit of facts depicting the Black experience in Minnesota.
- ☆ **WASHINGTON COUNTY COURTHOUSE** — Stillwater. Minnesota's oldest courthouse restored into a "living museum" and educational center.
- ☆ **MINNESOTA RIVER VALLEY** — Shakopee. Depict era between 1830 and 1900 through historical settings and an interpretive center.
- ☆ **HINCKLEY FIRE MUSEUM** — Hinckley. Restoration of old Northern Pacific Depot depicting Great Hinckley Fire and railroad's role in saving lives.
- ☆ **MINNESOTA'S ETHNIC HERITAGE** — St. Thomas College. Minnesota history examined, discussed and demonstrated in nine separate programs.
- ☆ **IRON RANGE INTERPRETIVE CENTER** — Chisholm. In the deserted Glenn mine, depicting unique cultural and geological development.
- ☆ **FORT SNELLING** — Historical Society. Minnesota's first military fort restored, costumed drum and bugle corps perform, and life at the fort is re-enacted.

- ☆ **JOHN PHILIP SOUSA MEMORIAL BAND** — Edina. Authentically costumed statewide touring group playing Sousa marches. Schedule this entertainment for a group activity, parade or exhibition.
- ☆ **SOUTHWESTERN MINNESOTA HISTORIC REVUE** — Fully staged and costumed dramatic review of history of southwestern Minnesota. Schedule this regional touring company for a community festival.
- ☆ **SILVER BROOM SWEEPSTAKES** — Duluth. World curling championship in Duluth with over 6,000 international visitors.

- ☆ **FINNISH CULTURE AND LANGUAGE CAMP** — New York Mills. Summer learn on the site of restored farm home and language camp and buildings.
- ☆ **INFORMATION AND REFERRAL SERVICE** — Moorhead. Central service for situations and resource development.
- ☆ **MILL RECYCLING CENTER** — Wright County. Educational environmental model for the development of community programs.

## ☆☆ BICENTENNIAL PROGRAMS OF SPECIAL INTEREST ☆☆

... plans are well developed for a number of special programs throughout the state that will offer a variety of ways to participate in the Bicentennial.

**FREEDOM CELEBRATION** — Response to the challenge and a celebration for ex-chemically d their families. **FARMFEST '76** — A giant expo and a tribute to America's farmers at Lake Crystal. From west to east, a covered wagon pilgrimage to arrive in Philadelphia on July 4, 1976. **BICENTENNIAL CENTER** — Minnesota's largest and most comprehensive Bicentennial exhibit in the IDS Center in Minneapolis. **LIFELONG LEARNING SOCIETY** — To make learning easier, more accessible and a constant ex skilled and semi-skilled workers. **MISSISSIPPI RIVER PROJECT** — Will bring programs relating to future of Minnesota's rivers to the communities. **AMERICAN ISSUES FORUM** — Exploration of the American society. **COMMUNITY RESOURCE NETWORK** — Aid communities in realizing goals. **LEARNING AND ABANDONED AUTO PROGRAMS** — Will seek to improve the environment.

# Premier

SINCE 1902

## does it right electrically.

Electrical transmission and wiring systems, large and small, substations, transformers, metering, in-plant distribution control.

Any electrical need, installation or contract maintenance.

**PREMIER ELECTRICAL CONSTRUCTION CO.**  
115 East Grant Street  
Minneapolis, Minnesota 55403  
(612) 332-7393

Aurora • Chicago •  
San Juan, Puerto Rico

## ARRIGONI BROTHERS COMPANY

TERRAZZO • CERAMIC TILE • MARBLE  
Epoxy and Cement Exposed Aggregate  
Panels cast in place or precast  
**PREEMA SPECIAL WALL FINISHES**

WALKS  
DRIVES  
PATIOS  
CEMENT FLOORS

Founded in 1927

**Arrigoni Brothers Company**



817 Vandalia St.

645-9321 St. Paul



# THE BICENTENNIAL AND ARCHITECTURE

Becky Hoover

"America needs the Bicentennial," says Tom Vecchi, a Duluth architect and president who serves as the Minnesota American Revolution Bicentennial Commission (MARBC) co-chairperson. "To understand the Bicentennial is to take part in community events and discover that people haven't talked to each other in 20 years who are working side by side to celebrate America's birthday. This sort of thing is happening throughout the nation. Labor and industry are coming together, people from all backgrounds are working hand in hand. The reasoning behind all of this is simple—People see the Bicentennial as a once-in-a-lifetime opportunity."

In 1972 Vecchi was appointed to the MARBC by Governor Wendell Anderson and when the Commission was reorganized by the Legislature in 1975, he was re-appointed and then elected to serve in a leadership capacity.

The Commission he heads has been charged by the Legislature to "plan, encourage, develop, coordinate, and implement an overall statewide program for Minnesota's observance and activities associated with the American revolution (commemoration) . . . ." "We haven't needed to encourage people to get involved in the Bicentennial observance, they've come in throngs," Vecchi said. "There have been some problems, though, in getting together the resources needed to get some of the projects off the ground."

The MARBC has presently recognized as official Bicentennial Communities 293 villages, cities and counties. Ninety percent of the state's population live in Bicentennial Communities and each community must, in order to be recognized, have one project in each of the Bicentennial thematic areas.

The problem of getting resources, both money and volunteer effort,

together is being addressed by the Commission's finance committee which has recently convened a private sector task force, open ended in membership. Vecchi, a liaison person to the committee, is optimistic that the task force will be successful in developing a program that will allow for involvement by all of the state's businesses and private organizations.

Vecchi claims his role in Minnesota's Bicentennial observance is a "logical extension" of his role as an architect. "Architecture is a social art. When a building goes up in a community, everybody is affected, those who use it, those who see it. I'm happy to say that architects are participating in the Bicentennial in an organized way and many are participating as individuals."

The contributions of architects to the state's history are being recognized as well by community people who have developed architecture related programs in every one of the three Bicentennial thematic areas established by congress. The projects range from restorations to future oriented projects calling for sensitivity by archi-

ects to the special needs of the handicapped.

One restoration project involves the Old Federal Courts Building in Saint Paul erected between 1890 and 1902 for \$2,500,000. The massive five story neo-Romanesque structure was left vacant and deteriorating in 1962 when all federal offices moved to a new building. Many people in Saint Paul got into the act of saving the building and out of their efforts came the Minnesota Landmarks organization. At the present time the exterior of the building has been completely restored but the interior still needs millions of dollars worth of work. When the building is completed it will serve as a community center housing art exhibits, studios, concerts, restaurants, public meeting rooms and offices.

A special four-day Bicentennial festival is planned around the Old Federal Courts Building and will culminate July 5, 1976. The event will feature ethnic costumes, foods, dances and according to Georgia DeCoster, Executive Director of Saint Paul's Bicentennial, "is a festival to really honor all of the people of Minnesota."



The Murphy House, a reconstructed Inn of the 1850's, of the Minnesota Valley Restoration Project.



Another courthouse being restored is the Washington County Courthouse in Stillwater. The classic revival structure with strong Italian influence was completed in 1870 although ground breaking ceremonies were held in 1867. Natives of Stillwater like to say that the long delay in completing the building was due to the great difficulty in positioning intricate patterns of imported ceramic floor tiles. Local workers were, according to the story, unable to solve the jigsaw pattern of the tiles and were about to call in a specialist from New York when a William Willim stepped into the breach.

An especially ambitious restoration, the Minnesota Valley Restoration Project, is spearheaded by Margaret MacFarlane. The project is located just outside of Shakopee on the Minnesota River and is referred to by her as "a living museum." Not only are structures, including an Indian teepee, farm buildings, churches, halls and even a Murphy tavern, restored but the actual life styles of the settlers are re-lived as volunteers play their roles and wear their costumes.

The amazing thing about the project, Vecchi said, is its high degree of community volunteer support. The project has 15 year around volunteers who do the chores, milk the cow, and feed the chickens, goat and sheep. The number of volunteers increase to 50 in the summer as students come to the project to experience the elaborate attempts that have been made to create an environment that actually reflects the history of the area.

The Army Air Force Reserve is scheduled to add to the Minnesota Valley Restoration. In 1976 it will be contributing construction skills to a number of Minnesota projects.

A statewide system of interpretive centers, semi-educational in focus, has been endorsed by the MARBC as an official Bicentennial project. Topics to be explored include mining in Chisholm, forestry in Grand Rapids and the history of the Grand Mound in International Falls. Many of the interpretive centers will be architecturally unique; for example, the Charles A. Lindberg center located in Little Falls has floor and ramp angles that simulate flight ramps used by Lindberg.

Vecchi said there are "too many to count" restoration projects in Minnesota. Other projects mentioned were the restorations of a Victorian home in Rochester, a Finnish farmstead in New York Mills, Saint Jacob's Hall in New Hope, the Duluth Depot, and the Greyhound Bus Depot in Hibbing. Vecchi said that many projects going on have received MARBC grants. "Unfortunately, there isn't enough money to go around. When there is money and a clear need, the Commission does what it can."

Bringing together Minnesota's unique architectural structures is an Architecture Tour Guide which will be published by the University of Minnesota sometime in 1976. The guide with the support of the Minnesota Society of Architects, will trace the development of the state's architectural environment from early settlement to the present day. The MARBC is especially proud of this project, Vecchi said, "because when it was almost dead for lack of funds, the MARBC was able to come in with a grant that brought it back to life."

(continued)

## FOR ARCHITECTS

### ARCHITECTURAL PRECAST CONCRETE

#### FINISHES AVAILABLE IN:

- Exposed Aggregate
- Acid Etched
- Honed
- Sandblast

Name it — we'll make it.

We specialize in colors and textures to match brick, stone and concrete.

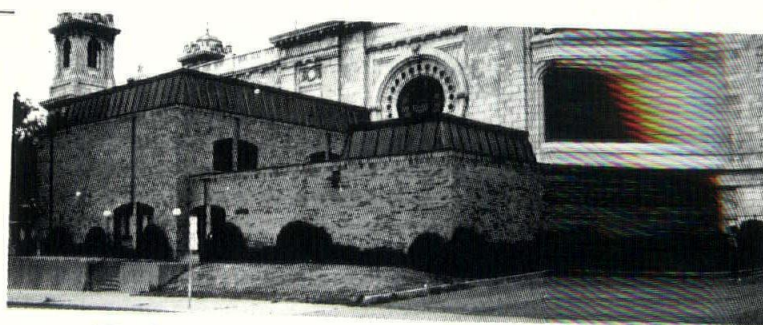
**AMERICAN**  
**ARTSTONE COMPANY**

Box 297, New Ulm, Mn. 56073  
507/354-8835

or

Robert J. Snow, Rep.  
612/374-1216

Minneapolis, Mn.  
Concrete Specialists Since 1915



**FOR LEASE**  
**Basilica Convent**  
15 N. 16th Street  
Minneapolis, Minnesota

#### Building Features

- 8 Private Rooms with Basins • 7 Bathrooms
- Conference Room • Kitchen and Laundry Facilities

This newer property is available immediately with very favorable lease terms. Please contact Tom Curry.

**towle+** MORTGAGE BANKER  
REAL ESTATE REALTORS  
PROPERTY MANAGERS  
212 SO. 6TH ST., MPLS., MINN. 55402 • (612) 333-2445





*Duluth Depot, a Bicentennial restoration presently used as community center.*

"The Bicentennial isn't limited to looking backwards. It is not a time to sit around and just pat ourselves on the back," Vecchi claims. "The Bicentennial is the time that Americans had better start looking towards the future. This country has been here for 200 years, longer than any other form of government on the face of the earth and if we want to see a Tricentennial celebration, the time to start planning is now."

There are some Bicentennial projects that accomplish the look to the future for which Vecchi speaks. One

such project that celebrates the past but takes a look forward is sponsored as a major Bicentennial effort by the National Association of Home Builders. The Meeting House program proposes a permanent legacy to the American people of 55 historic sites. One site will be developed in each state and territory and used as a meeting place for citizens concerned with the preservation of the cultural heritage and the quality of the physical environment. Necessary legislation for the program was presented by Senators Jackson and Johnson and will be

voted upon sometime during this session of congress.

Another horizons project is the Barrier Free Buildings of the Minnesota State Council for the Handicapped. The effort focuses on providing information that will prevent and help eliminate architectural barriers to handicapped persons. The Council will sponsor a spring conference in 1976 dealing with such barriers as they relate to recreation, housing, transportation and public accommodations.

When asked if any of the architectural projects need support, Vecchi said, "There isn't a one of them that would turn down help if it was offered." He added, "That's what the Bicentennial is all about anyway, offering what you can to celebrate pride in our country's development. Getting involved is the easiest thing in the world. All it takes is a phone call to the nearest Bicentennial office." □

*Ms. Hoover, a free lance writer, is presently Research and Program Coordinator for the Minnesota American Revolution Bicentennial Commission.*

## WE CUSTOM MANUFACTURE

Tin-clad Fire Doors - Metal Covered Doors  
Special Approved Post Office Doors  
Aluminum and Stainless Steel Covered Doors

# STREMEL BROS.

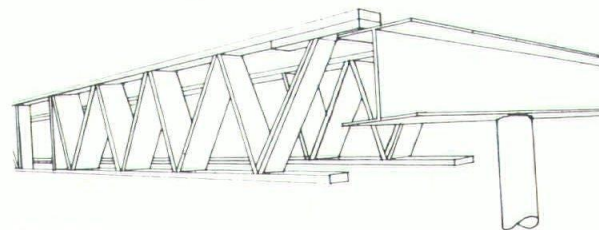
We represent the following companies: Kinnear, Div. of Harsco, Columbus, Ohio, Custom Rolling Steel Doors, Grilles and Counter Shutters; F.L. Saino Mfg. Co., Memphis, Tenn., Flush (A) Label Slide Doors with Reel-Type Closer, Industrial Slide Doors, Power Operator or Air Operated with Seal Type-Features.

CALL ED SIEMS OR DON CHRISTENSEN

# STREMEL BROS.

260 Plymouth Ave. No.  
Minneapolis, Minnesota 55411  
612/339-8261

## Bar Joist Performance at LUMBER PRICES



**A NEW CONCEPT  
for  
Floor and Flat Roof  
Engineered Structural Systems**  
On your next apartment or commercial project

**SAVE  
TIME — LABOR — MONEY**

CALL (612) 452-2990  
or write for literature & information

**G. M. STEWART TRUSS**  
925 Yankee Doodle Rd.  
St. Paul, Minnesota 55121  
(Division of G. M. Stewart Lumber Co.)



# EAMES

(Continued from page 25)

To see how careful Eames was you have only to look at Herman Miller's 1952 catalogue. The George Nelson furniture, always in context with the familiar, is nostalgic today because it so legibly created the good environment of the 40s. It was legible as sociology and economics, too: the sudden high cost of square footage, multi-use expressed in such things as the slat bench. The furniture still belonged to the wall as it had since Frank Lloyd Wright, out of the Japanese interior. And when any Nelson piece, desk or seating, had penetrated the room space, it was still wall-moored.

Then to the Eames pieces. They played Klee to Nelson's Braque. Light and mobile, they belonged to the floor rather than to the wall. In the catalogue, none appeared in context with a room except for a card table spread with breakfast for three; nor was that a cozy closed-in room — it was the dining-kitchen of the Eames glass-cage house opened to a row of eucalyptus and a stretch of meadow. Most of the presentations were fragmented, wrenched out of context; objects chosen to accompany them destroyed or suppressed scale; the marguerite in the common clay pot near the large, low coffee table with wire strut base and black laminated top. Or the presentations purposely introduced an alien object which diverted attention from the furniture, as for instance the large paper butterfly dropped prettily on the floor of an aisle between rows of storage cabinets; the rock on top of one case in the foreground.

I still haven't mentioned the strange newness (in 1946) of the molded plywood chair. The first version having been sanctioned by The Museum of Modern Art and the Eames version by *Arts & Architecture*; appearing many times in the pages of the latter, it lacked not in credentials. It was to become the darling of young architects, the obligatory foreground object in photographs of the new Modern house of the late 40s. It had the wit and scale which gave it the character of a grace note in those post-war houses. In the Nelson pieces wood appeared in planes broken by a handsomely designed and crafted piece of hardware; the wood of the Eames chair proclaimed itself plywood by revealing the plys. The hunger for that chair may have been reflected in the sales, but not the sense of achievement in owning one that was felt by any number of young architects who had finished school during the years when Modern was still an optional style (less preferred in California than Andalusian), had survived the war and opened their first office.

The chair was much in the news: *Time* referred to it as the "potato chip." Saul Steinberg drew it for *The New Yorker* with an antimacassar on the back.

Much of the Eames furniture came out of needs we did not know we had, the most striking example being the molded polyester group introduced in 1949. The boom in civic and office buildings in the 50s created a need for lightweight comfortable seating that could take abuse; stackable chairs that could be brought out easily for overflow spectators; bright colored chairs in the spirit of an age that questioned marble monumentality and permanency. The plastic

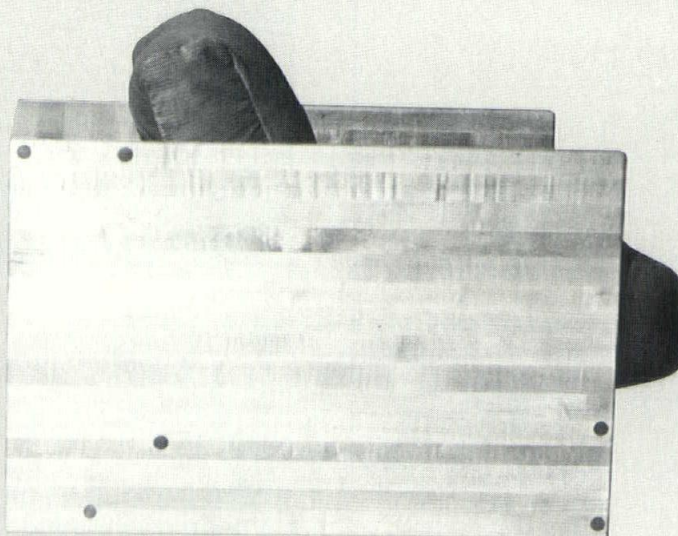


shells appeared in tandem in many of the new airport terminals; and the tandem seating for O'Hare and Dulles airport terminals came out of another Eames family, the 1958 aluminum group.

But Eames was capable of a *tour de force* — the 1956 lounge chair and ottoman of molded rosewood. Eames said that the chair sprang from his question to himself:

*Eames's Venice, California studio — essentially a ground floor loft — has provided excellent work space for a diversity of projects since the 40s*

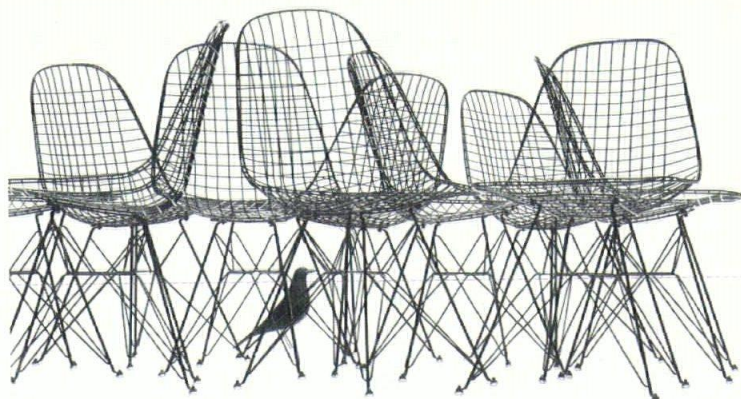
Sawhill makes good  
contract furniture  
and custom millwork to match.  
And Sawhill does it  
all right here in Minnesota.



## Sawhill

89 South 10th Street,  
Minneapolis. 332-7877





Wire chairs, developed in 1951, are shown with wire strut bases, no upholstery and a black bird, their symbolic mascot.

whatever happened to the leather chair in the Elks Clubs? His version has, rather, become the Morris chair of the 20th century as far as comfort goes. Its prestige was (still is) so high that it was often the first chair to be bought for the living room of a new house; the rising building costs of those years often ate into the budget for furnishing and it was not unusual to see an interior practically bare except for the one chair. Seeing it thus gave it an un-Eames like

character: it lacked two notable characteristics of the molded plywood chair, the machined look and the mobility. It was truly in the tradition of the handcrafted Morris chair . . .

There are few Eames pieces that lie outside the three families — molded plywood, molded plastic and the aluminum group. The first Eames series was varied, as that of young offices is apt to be; most of the molded plywood tables are out of production, as well as a magnificent molded plywood folding screen; a 1944 molded plywood armchair with a cantilevered steel tube base was, however, the parent of the rosewood lounge chair. The amusing 1968 chaise appears to have a history in medical therapy

rather than in seating, perhaps because of the over-engineered frame. The ability to draw upon imagery outside the tradition of furniture is a source not only of wit but comfort. Is not the seat of the molded plywood chair out of farm machinery, and the compact sofa of 1954 out of auxiliary seating for the automobile or bus?

Much of the Eames imagery is from the archives of American machinery or from standard catalogues of machined parts; these are taken out of context, given an elegance. Their appeal is in the mixture of familiarity and surprise.

There is a loyalty to the family groups, a loyalty to their own special imagery; and today the number of refinements to existing pieces far exceeds the creation of new ones. "But," as Konrad Wachsmann says, "the number of examples doesn't matter. In furniture the century is his. Ten churches or one, Brunelleschi had said it."

In the large industrial space in Venice, California, which the Office of Charles and Ray Eames has occupied now for three decades, the activities of furniture design, film-making and preparation of exhibitions co-exist. If the three appear to have been cut from the same bolt it is because one developed so naturally out of the other. One unifying factor is Ray Eames's rich and audacious imagery.

Ray's hand is clearest in the films and exhibitions, both initiated in 1950, but associates recognize her refining touch in the forms of the furniture. □

**TORO**

**TORO**

**MTI**

MINNESOTA  
TORO  
INC.

IRRIGATION  
SPECIALISTS IN  
DESIGN INSTALLATION  
AT ALL LEVELS

- GOLF COURSES
- COMMERCIAL
- RESIDENTIAL

ARCHITECTS CONTACT  
MINNESOTA TORO FOR  
YOUR IRRIGATION  
DESIGN NEEDS. WE'VE  
GOT SOME GREAT  
IDEAS, PROVEN EX-  
PERIENCE, & TOP  
QUALITY PRODUCTS.

**TORO**

CALL  
544-0111

**TORO**



mahin  
walz

**Modernfold**

FIRST IN WALLS THAT MOVE

PLUS

\*PROFESSIONAL CONSULTANTS

PLUS

\*EXPERT INSTALLATION

EQUALS

\*YOUR BEST VALUE IN  
OPERABLE WALLS

MAHIN-WALZ, INC.

4309 Shady Oak Rd., Hopkins,  
Minn. 55343, Ph. 935-7759



**STOCKERS  
INC.**

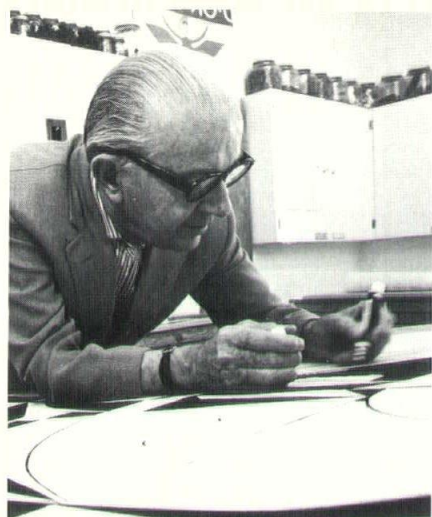
MECHANICAL-  
ELECTRICAL  
CONTRACTORS

PLUMBING-HEATING-ELECTRICAL  
AIR CONDITIONING-VENTILATING  
CERTIFIED WELDING

CALL 715-294-2134

**Osceola, Wis. 54020**





## GIRARD

(Continued from page 28)

### The restaurants . . .

In the postwar years New York was the only great metropolis without important new clubs and restaurants. Other American cities had them of necessity; San Francisco opened several each year. Manhattan had — and still has — some excellent chefs serving in intimate rooms without artificial flowers, neon lights or Muzak, but no distinctive new spaces or expressions of an

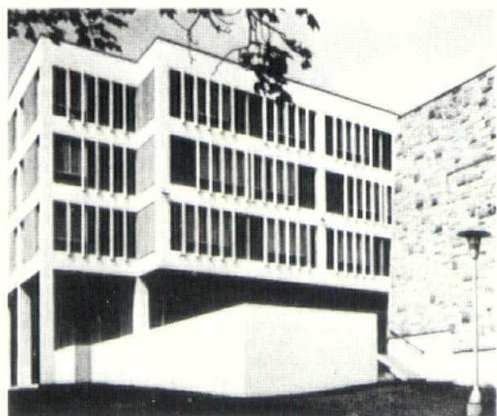
evolving lifestyle were evident. When the Four Seasons pompously, ceremoniously opened in the lofty spaces of Mies van der Rohe's bronze-clad Seagram Building in 1959, the ice broke; two years later, when La Fonda del Sol opened in the then new Time-Life Building, the ice melted. So did the critics and public. New York was once again a restaurant capital.

While the Four Seasons was an attempt to reinterpret, in contemporary terms, dining in the grand manner, Girard's approach at La Fonda was revolutionary. Its *design* was grand — total, expansive, complete to the buttons on the waiters' jackets — but the spirit was as inclusive as a fiesta. Families came; so did actors, designers, executives, foreigners and young people out on a "big date." They came for the exotic foods of Latin America, the joyous folk art celebration, but mostly for the ambience. All these ideas were Girard's, from the Spanish-American concepts to the exposed grills of sparkling tile, to the exotic china, evocative menus, and the extraordinary, articulated brass sun itself. High overhead stretched an acre of the best ceiling lightgrid yet designed. Beneath it the bar was enclosed in adobe, pierced for vignettes of the most extraordinary folk art ever to grace commerce. The windows were screened with golden layers of tautly stretched ribbons. These ribbons, warp knit of such improbable combinations as jute and Lurex, with a dozen or more variations, were — then as now — without precedent or peer.

Throughout La Fonda del Sol, color and light were used to create a dozen moods. So were the spaces, from the horizontal

and open to those enclosed by parapets and canopies. Fabrics, particularly a variety of striped Miller wools, supported this orchestration. Miller solid colored upholsteries varied the hundreds of Eames dining chairs — the one constant, unifying denominator. When Girard's "other restaurant," L'Etoile (commissioned by Jerome Brody who, when with Restaurant Associates, had been in charge of realizing La Fonda) opened five years later in New York, its contrast with La Fonda and with all that the world had come to expect from Girard was pure genius. Virtually without color, without Latin or folkloric overtones, its mood was cool and chaste. The dramatic understatement, involving light and surface, gull grays with sparkling whites was, although it predated the revival of Art Deco, reminiscent of pre-war Parisian urbanity and particularly of the French liner, Normandie.

Although L'Etoile and La Fonda have long since closed, they deserve more focus than these few lines. For these environments were more than food and decor, more than a business; to thousands of people who experienced these spaces, it was a life-expanding revelation that creative, zestful informality was more convivial than "company manners." That this quality of design was out of a museum context and in actual use made it that much more influential. However, the most important statement, more durable than the totality of the planning, the props, or the color was the assertion that the prime concern of environmental design was how people *feel* in a space. This is Girard's message and main contribution . . .



WATERPROOF

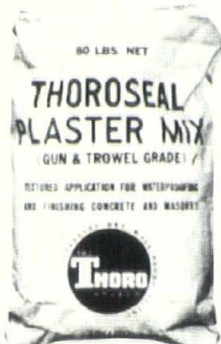
**THOROSEAL FINISHES  
FOR EXTERIOR CONCRETE**

CALL

**CONPRO, INC.**

781-9583

UNIV. & 30th AVE. N.E., MPLS.



**INTERSTATE BRICK**

structural stoneware



**LUDOWICI-CELADON COMPANY**

*Architectural clay products*



**Minnesota Tile Supply**

4825 FRANCE AVENUE NORTH MINNEAPOLIS, MINNESOTA 55429  
TELEPHONE 612-533-2461

**WHEN YOU  
THINK OF  
TILE**

ALWAYS

**THINK**

OF US



**BI BI BI**  
**BI BI BI**  
**BI BI BI**  
**BI BI BI**  
**BI BI BI**  
**BI BI BI**

His total design for Braniff International, 1965, brought Girard's design (and Braniff) to the attention of a very broad audience. It startled a generation into the awareness that even the look-alikes of mass transit could — through color and pattern — achieve metamorphosis. While other designers wondered where to put which exterior color, Girard bathed entire planes in the sunniest of hues — and a variety of hues at that. Similarly he color-structured all the field equipment. While others sought the "right" upholstery, Girard employed a dozen related geometries so that the whole interior sang as a choir. He designed the graphics and terminal lounges complete with folk art collections. In airline history, this was Camelot . . . . □

## PROPST

(Continued from page 30)

company's line of products. Herman Miller was not a new name to Propst (he had called on them a couple of years before with his fishbone connector) but he had doubts about whether the company's interests were close enough to his own. "Yet I knew that all the charging around I had been doing was superficial," Propst says now, "and Herman Miller was willing to sponsor the kind of probing I needed to do." The kind of probing he needed to do is represented by eight years of research, testing and design time for Action Office, ten years for Co/Struc, 17 years for the timber harvester . . .

That arrangement continued until 1970, when the Herman Miller Research Corporation was formed, primarily as a good way of using Bob Propst. It is located in Ann Arbor to take advantage of University of Michigan research facilities, but also because both geographical and psychological distance from the parent company are desirable to Propst, a man described by himself and others as cherishing a bristly independence . . .

At its inception, the Research Corporation began developing the ideas that became Action Office. Although Propst's mandate was to explore problems for which "a product not necessarily furniture" might be the solution, the first general problem he focused on was the office; and the basic product, though not the only one, was furniture . . .

The development of Action Office began with a battery of questions that is continually being enlarged and modified. How do people work in offices? Sitting or standing — or even lying down? Should a door be opened or closed, and for how long? Should there be a door? Where are phones best located? How often do executives nap in offices? Should the practice be discouraged? How much office equipment is purchased and installed for actual work purposes and how much for purposes of conferring status? Is neatness necessarily an asset? Is it more efficient to converse with colleagues in your office or theirs?

The point was not that such questions, or others like them, had never been asked before. They had. The point was not that they had never been answered before in theory; some had, usually by social scientists. But they had never before been regarded as answerable by design.

Similar concerns had been raised by management consultants, time planners and even, in the 30s, by efficiency experts, who imposed their answers on workers as if *the workers* were the equipment. Of course office behavior had been examined in literature by authors as different from each other as Arnold Bennet, Sinclair Lewis, Stephen Leacock, and Elmer Rice. But Propst was posing his questions with the idea that they could lead to designing and making some answers.

What they lead to was Action Office, a system of office components, mostly panel hung or wall hung, that can be arranged in an enormous variety of config-

## Luxury seating without a luxury price tag



**SS**  
**Sport Seating co.**

### ARCHITECTURAL PRODUCTS

127 West Winifred Street  
 St. Paul, Minnesota 55107  
 Phone: 222-7266

Division of P.M. Johnson, Ed Hillstad & Associates

## A REMINDER...



... WORK CURRENTLY UNDER CONSTRUCTION MAY REQUIRE TEMPORARY HEATING THIS WINTER.

### TEMP-HEAT OFFERS THE FOLLOWING SERVICES...

- \* EXAMINING TEMPORARY HEATING SPECIFICATIONS AND ADVISING HOW THEY CAN BE MOST ECONOMICALLY MET
- \* ESTIMATING HEATING COSTS AND HELPING YOU ESTABLISH A WINTER HEATING SCHEDULE
- \* PROVIDING ASSISTANCE IN LOCATING AND EXPEDITING GAS SERVICE
- \* PROVIDING THE MOST ECONOMICAL SIZE HEATER FOR A JOB WHEN AND WHERE IT IS NEEDED
- \* PROVIDING ROUTINE INSPECTION AND 24 HR./DAY SERVICE ASSISTANCE

**WE HELP MAKE OUR CUSTOMERS MORE COMPETITIVE**



TEMPORARY HEATING AND VENTILATING EQUIPMENT  
 Minneapolis (612) 888 9468 Duluth (218) 728-4441





urations for particular needs and can be swiftly rearranged as those needs change. Similar questions about health care led to Co/Struc (for "coherent structures"), a materials management system for hospitals. Because office work consists largely of

processing paper, further questions arose, having to do with how information is displayed, recorded, and passed on. Also with how it is hidden in drawers or under stacks of other information, of ten of lower priority. Propst calculates that a pile of papers

higher than three inches is too high for productivity, and has designed tambour roll tops to inhibit such piling up.

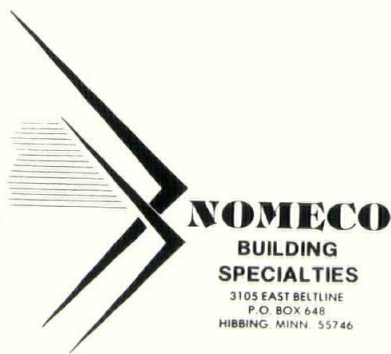
Change is intrinsic to the Action Office, which Propst likes to call a "forgiving" system, because its ease of revision allows the user to make mistakes without being condemned to live with them until the furniture wears out. It is also a self-forgiving system, continually modified and refined — a process relatively easy to do because of the anonymity of the basic components.

"Designers often express wonder at why we would want to deliberately make an unobtrusive design," Propst says. "As opposed to the world of architects and designers we're more interested in the world of managers — low key, long term, a quiet kind of thing. We're not trying to make overt design statements. We can't come in with the shape-of-all-time. We're more interested in figuring out the context. Other people can try to do the show biz and make it as pizzazz guys."

The work of Bob Propst is in the vanguard of design in several important respects. He designs situations rather than objects, he practices a peculiar kind of advocacy design, and he initiates projects instead of waiting for them to be summoned up. □



Architecture Minnesota expresses its gratitude to the Walker Art Center for its permission to excerpt text and photographs from *Design Quarterly* 98/99.



- METAL WALL PANELS
- LIGHT GAGE METAL FRAMING
- PREFABRICATED STRUCTURAL WALL PANELS
- HOLLOW METAL DOORS & FRAMES
- BUILDERS HDWR

Hibbing Office  
(218) 263-8361  
Minneapolis Office  
(612) 335-4958

*Circular, Spiral,*  
**CONVENTIONAL**  
*Industrial, Commercial,*  
**ORNAMENTAL**  
**STAIRWAYS**

*Fabricated To Architects  
Owner's Specifications*

**C. W. OLSON, INC.**  
1310 QUINCY STREET N.E.  
MINNEAPOLIS, MINNESOTA 55413  
Phone: (612) 335-1143

**NEAL  
DEMOUNTABLE  
PARTITIONS &  
LANDSCAPE  
DIVIDERS  
ARE:**

- 1 DESIGNED TO ALLOW ARCHITECTURAL INPUT
- 2 PRICED COMPETITIVELY
- 3 MANUFACTURED, INSTALLED & SERVICED BY DEPENDABLE LOCAL PERSONNEL

**neal**

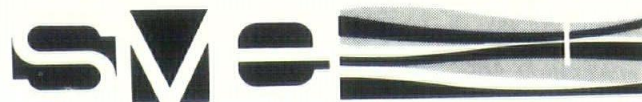
**w. e. neal slatco co.**  
7975 WALLACE ROAD  
EDEN PRAIRIE, MINNESOTA 55343  
TELEPHONE (612) 944-2440



# GEOTECHNICAL ENGINEERING CORP.

Soil and Foundation Engineering  
Consulting and Testing

1925 Oakcrest Ave., Roseville, MN  
612 636-7744



SOIL BORINGS AND REPORTS  
FIELD INSPECTION OF SOILS  
GEOLOGIC INVESTIGATIONS  
TESTING OF CONSTRUCTION MATERIALS

SOIL & MATERIALS ENGINEERS, INC.  
7900 77TH AVENUE NORTH • MPLS., MINN. 55445 □ 612/425-6478



# GAUSMAN & MOORE, Inc.

CONSULTING ENGINEERS  
Mechanical and Electrical Systems Design for  
COMMERCIAL, INSTITUTIONAL, INDUSTRIAL

700 NORTH ROBERT STREET  
ST. PAUL, MINNESOTA 55103  
612/225-6577



INTERIOR DESIGN SERVICE  
OFFICES • BANKS • SCHOOLS  
CLUBS • RETAIL STORES  
CHURCHES • RESTAURANTS

# WEIDT ASSOCIATES

84 SOUTH SIXTH STREET • MINNEAPOLIS, MINN., 55402  
(612) 333-5567



ENGINEERS  
SURVEYORS  
SOIL TESTING

515-232-7231

ames engineering and testing co  
a subsidiary of JRM  
2010 east 13th street • ames, iowa 50010



Hopkins, Minnesota 612-935-6901  
Gaylord, 612-237-2924  
Fairmont, 507-235-6658  
Mankato, 507-387-4428  
St. Cloud, 612-253-1000  
Brainerd, 218-829-1751  
Worthington, 507-372-2914  
Ames, Iowa 515-232-7231

rieke carroll muller associates inc  
engineers surveyors



twin city testing  
and engineering laboratory, inc.

662 CROMWELL AVENUE  
ST. PAUL, MN 55114  
PHONE 612/645-3601

COMPLETE TESTING SERVICES IN:  
soil mechanics, foundation engineer-  
ing; construction materials; NDT  
and metallurgic analysis; chemical  
analysis.

An Expansion of  
Soil Engineering  
Services, Inc.



MINNEAPOLIS/ST. PAUL 6800 S. County Rd. 18, Mpls., Mn. 55435/612 941 5600  
NORTHERN MINNESOTA 3219 E. 19th Avenue, Hibbing, Mn. 55746/218 263 8869

Test Borings, Inspection of Construction, Material Testing  
of Soils, Concrete, Bituminous and Building Components.

# OLIVER D. BILLING AND ASSOCIATES, INC. CONSULTING ENGINEERS

Systems for Buildings

Air Conditioning  
Refrigeration  
Air and Water Pollution  
Abatement

Energy Conservation  
Plant Process Engineering  
Lighting  
Power Distribution

2706 W. 7TH BLVD. • ST. PAUL, MINN. 55116 • 698-0814



SOIL EXPLORATION  
COMPANY  
662 CROMWELL AVENUE  
ST. PAUL, MN. 55114  
PHONE 612/645-6446

# SUB-SURFACE INVESTIGATIONS

ENGINEERING  
— Analysis  
— Recommendations  
— Consultation

FIELD INVESTIGATIONS

LABORATORY TESTS



# BOOKS

## New Publications

### From The Metropolitan Council

*Development Framework Policy Plan.* In final printed form, the publication sells for \$1.50. It contains a cornucopia of regional land data on population, land use, urban services, etc.

*Urbanization and Land Features Map, 17/22.* This four color map, one inch=5 miles, shows urbanized land and selected environmental features. Copies are \$.25 each.

*Development Framework Plan Map, March, 1975.* The map shows the urban and rural service area boundary, and other policies contained in the Development Framework Policy Plan. The 17/22 two color map, one inch=5 miles, cost \$.25 each.

*Recreation Open Space Policy Plan.* The document contains adopted Council policy on recreation open space. The 47-page document sells for \$1.50.

*Draft Metropolitan Investment Framework Chapter.* The document

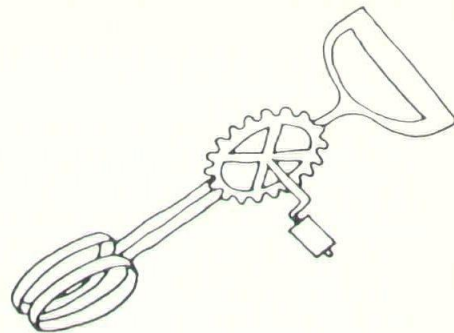
outlines the proposal to set more precise regional policy on regional fiscal matters. Copies are free.

*Council Advisory Committee Brochures.* The brochures will introduce you to each of the boards and advisory committees the Council works with. Copies are free.

*Housing Vacancy and Turnover Data, July-September, 1975.* Published quarterly, the report contains municipal level vacancy rate information. Vacancy rates and turnover data are useful indicators of housing market conditions. Single copies are available at no cost.

*Schools and School Districts 1975-1976 Map.* The map shows the locations of all public schools and school districts in the Twin Cities Metropolitan Area. The back side of the map lists school facilities by school districts and the district's 1975 mill levy. Copies of the 17/22 inch (1"=5 mile) three-color map are for sale at \$.25 each.

These publications can be obtained through the Council's Information Office, 227-9421, or by writing to the Information Office, Metropolitan Council, 300 Metro Square Building, Saint Paul 55101. □



THE ARCHITECTURAL COOK-BOOK, by Arthur Hawkins, with illustrations by Alan Dunn. New York, Architectural Record Books, 1975

Rosamond Tryon Jacob

THE ARCHITECTURAL COOK-BOOK must have been planned as a clever little paperback stocking stuffer for architects who enjoy cooking — or perhaps cooks who enjoy architecture. All recipients, however, will have to enjoy extremely far-fetched punning. From "Violet-le-Duck" to "Machu Peaches" recipe titles have endeavored to wring from the language of food architectural connections which at their best are groaningly funny and at their

## DALE

Tile Co



— CONTRACTORS —

CERAMIC TILE — MARBLE

— ACOUSTICAL

- CERAMIC TILE • QUARRY TILE
- SLATE • PATIO TILE
- MARBLE FLOORS AND WALLS
- ARMSTRONG INTEGRATED CEILINGS

DEPENDABLE QUALITY SERVICE FOR 45 YEARS

## DALE Tile Company

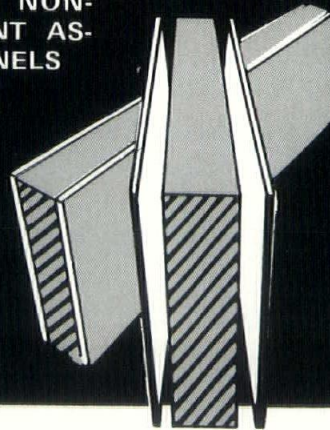
612-533-8631

Hwy. 100 & France Ave. N., Mpls., MN 55429

## CUSTOM FABRICATORS

\* INSULATED AND NON-INSULATED CEMENT ASBESTOS FACED PANELS

\* Design your panels from standard manufacturers colors in any thickness in sizes up to 4' x 12'. Our large inventory assures you of prompt delivery.



PPG  
GLASWELD

GOLD BOND  
PLASTI-CLAD

JOHNS-MANVILLE  
PERMATONE S

Consult Us For Price . . .



## Benoit Inc.

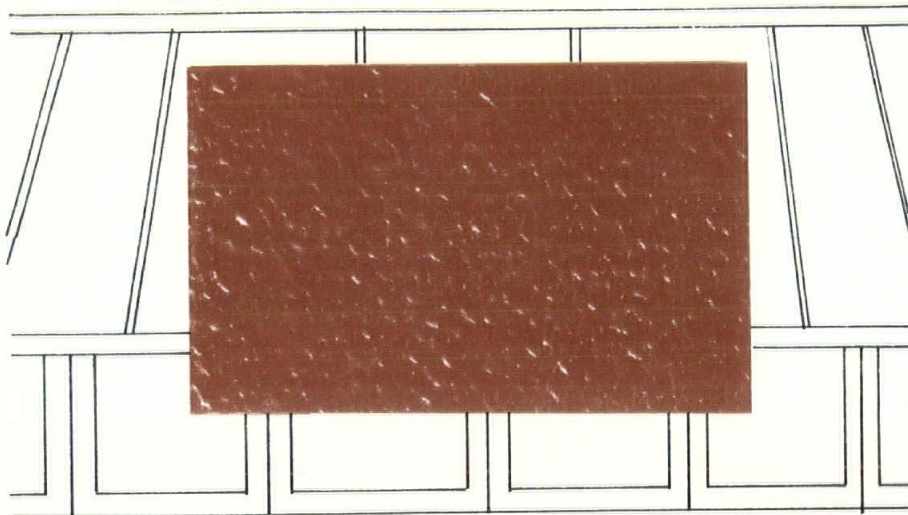
635 North Prior Ave. / St. Paul, Minn. 55104

612 / 646-1387



# If it seams good it must be ColorKlad!

or NEW ColorKlad Texturized "T"



ColorKlad seams seem to disappear!

Smooth ColorKlad's 24 gauge strength was developed to avoid waving, oil-canning, and buckling found in other metals. Now new texturized ColorKlad T eliminates glare and reflectivity, offering the architect even wider latitude in design flexibility.

Both ColorKlad and ColorKlad T are available in eight dramatic colors, each with its own color matched touchup paint and screws. Both carry the 20 year written warranty against fading and chalking.

ColorKlad. ColorKlad T. They seam like good ideas!



**Vincent**

**BRASS & ALUMINUM CO.**  
BUILDING PRODUCTS DIVISION

724 24th Ave. S.E.  
Minneapolis, Minn. 55414

Dial Direct Without Charge  
**800-552-1202**

SEND FOR OUR NEW  
**COLORKLAD BROCHURE  
AND COLORCHART TODAY!**

NAME \_\_\_\_\_  
TITLE \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



worst — as in "Bar-O-Que Sauce" or "Cantilever and Henry Bacon" (plain old liver and bacon) — just dumb. The recipes themselves are for the most part standard to quick-gourmet fare. A slight shift of the strained punster's frame of reference could have given us *THE LEGAL COOKBOOK*, or even, heaven forbid, *THE MEDICAL COOKBOOK*.

One might have hoped from the title some slightly deeper exploration of the intriguing structural and aesthetic analogies between architecture and cooking — delicious recipes which would delight not only the palate but the eye with their colors, textures and spatial arrangements — intricately layered tortes, a glorious Vol au Vent, or brilliant salades composees. Instead we have "Baked Hughes with Herbs Smith" and "Herrera the Dog" both of which follow in their entirety. The cartoons by Alan Dunn are nice.

#### Baked Hughes with Herbs Smith

4 pounds breast of ewe or lamb  
Herbs Smith (2 teaspoons dill, 1/2 teaspoon rosemary, 1 teaspoon salt, 1.2 teaspoon freshly ground pepper)  
Preheat oven to 350 degrees.  
Place the lamb breast in a shallow baking pan, meaty side up.  
Sprinkle with Herbs Smith, and bake uncovered for 1½ hours, or until tender and crisp. Baste from time to time. 4 servings.

#### Herrera the Dog

Pour equal parts of chilled champagne and either stout or ale slowly and simultaneously into a tall glass. □

*Ms. Jacob is a librarian with the Saint Paul Public Library and often cooks for an architect.*



# Looking for something new and exciting in the Twin Cities?

...then you need "TWIN CITIES... the all-time unabridged book of where it's at in Minneapolis, St. Paul and suburbs."

- Lifetime Twin Citians will be amazed at the many things to do, places to go and interesting facts that they know little or nothing about. Family things... and adult things.

- Occasional visitors will find this an invaluable guide to enhancing the enjoyment of a stay in the Twin Cities, whether for business or pleasure.

- For those sizing up the Twin Cities as a place to work and live, there's no better reference source on facts about what the metro area offers.

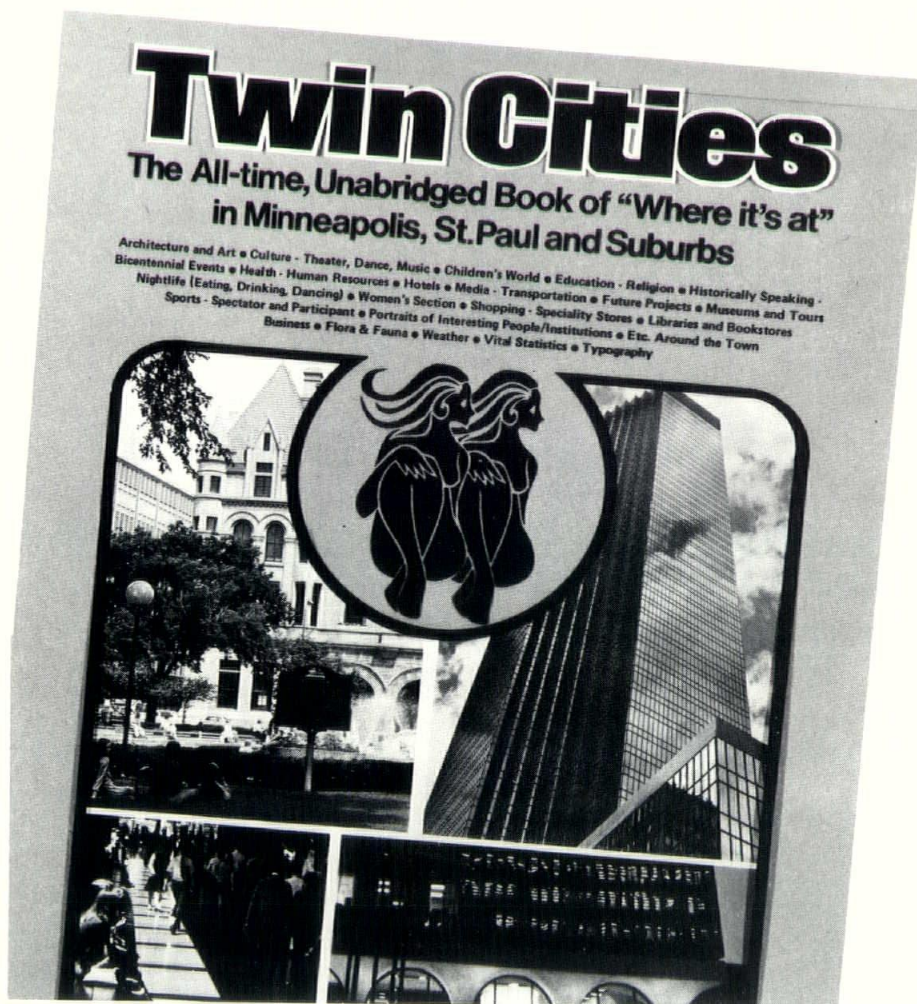
Inside a handsome four-color cover is well over 200 pages of exciting, interesting and helpful facts about every aspect of life in the Twin Cities — cultural events, education, history, government, dining, nightlife, schools, children's activities, sports, shopping, features on local personalities.

There's even a directory of directories to help with very specific questions and needs, a special women's section, tours you can take, and a section on future projects.

TWIN CITIES is filled with helpful charts, maps, diagrams and photos. It's a fun book!

This book is the result of many months of research, compiling and writing by a special editorial staff assisted by the editors of *Corporate Report*, *New Homes*, *Architecture Minnesota* and *Purchasing Management* magazines.

There has never been a book this complete in the history of the Twin Cities. No residence or business should be without at least one copy. It's a "must" for the reception area of every business and professional office.



## Order Now and Save

Newsstand sale begins in February, 1976. Cover price: \$4.95. By ordering now, you can have your copy for \$3.95 (and if your check accompanies the order, the price is \$3.45).

Quantity purchase prices are available. Contact Debbie Hickman at 835-6855 or write to TWIN CITIES, 7101 York Ave. So., Minneapolis, Minn. 55435.

Send this coupon and your check to: TWIN CITIES, 7101 York Ave. S., Mpls., MN 55435  
Please send me \_\_\_\_\_ copies of TWIN CITIES.  
Bill me ☐ Check enclosed ☐

Name \_\_\_\_\_

Address \_\_\_\_\_

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



# LETTERS

To the Editor,

In its latest transportation plan the Metropolitan Council demonstrates again its inability to understand the key role of transit — in the broadest sense of "how people get around" — in the development and well-being of our metropolitan area. By endorsing our continuing reliance on the private automobile, it perpetuates those very effects that it is supposed to control: suburban sprawl and urban decay. And as the elements of daily life become evermore diffused, our need to travel long distances increases, leading to the ever-greater proba-

bility of paralysis with every passing storm — as on freeways Jan. 10.

Nor will our shriveling downtowns be rescued by automated people-mover systems, any more than was train travel increased by the Union Depot escalator. The downtowns are notably uncongested, which is why retail business continues to move to the suburbs. Even *Fortune* magazine, in its generally admiring January article on Minneapolis, suggests that the council's proposed restrictions may result in "development in the boondocks beyond its jurisdiction, thus increasing the very sprawl that controls are supposed to contain."

The only effective way to achieve the goals of planning is to set up conditions that will lead to the desired results. The most effective single means would be a public-

transit system with high-speed, weather-proof, main-line components tapping the principal suburbs and concentrating into the downtowns. Such a system, by its attractiveness, would automatically shape growth and restore the downtowns to their original and still-desirable primacy.

For 20 years, now, we have had planning authorities in the Twin Cities area: first the Metropolitan Planning Commission and now its successor, the Metropolitan Council. It was during these same 20 years that most of the uncontrolled development has taken place. There is no indication that the current Metropolitan Council proposals will be any more successful.

Edward V. Lofstrom, Minneapolis

*Allied Plastics*



George Grove, Sales Manager

Can handle all your plastic fabricating jobs quicker & better by providing the following . . .

- Design Assistance
- Structural Specification
- Factory Testing
- Prototypes
- Glazing Specifications

Virtually every Plexiglas® fabrication process is available to you.

**DISTRIBUTION — CUTTING — FORMING — SCREENING**

**FIELD TAKE-OFFS IN METRO AREA**

Distributing Plexiglas, Quality  
and Service Since 1948.  
533-2771

ALLIED PLASTIC INC.  
7200 Boone Ave. No.  
Mpls., MN 55428

## ADVERTISING INDEX

Allied Plastics	50
American Artstone Co.	39
Ames Engr.	46
Fred G. Anderson	Cover 2
Architectural Products	44
Arrigoni Brothers Co.	38
Benoit, Inc.	47
O.D. Billing	46
Braun Engr.	46
Carney & Associates	12
R.B. Child	7
Conpro, Inc.	43
Dale Tile Co.	47
Drake Marble Co.	34
Carl W. Fogelberg Co.	11
Gausman & Moore	46
Geotechnical Engr. Corp.	46
General Office Products	33
Grazzini Bros & Co.	17
Landscape Structures	32
Mahin-Walz, Inc.	42
Minnesota Ceramic Tile Industry	16
Minnesota Lathing & Plastering Bureau	10
Minnesota Masonry Institute	6
Minnesota Tile Supply	43
Minnesota Toro	42
W.E. Neal Slate Co.	45
Nomeco Building Specialties	45
Nulook Corporation	36
C.W. Olson Co.	45
Pella Products, Inc.	15
Piping Industry Council	8
Premier Electric Construction Co.	38
Prestressed Concrete, Inc.	Cover 3
RCM Assoc.	46
H.A. Rogers Co.	22
Rusco Windows	34
Saari & Forrai Photography	22
J.L. Shiely Co.	4
Sawhill Furniture	41
SMARCA of Minnesota	11
Snow-Larson, Inc.	20
Soil Exploration	46
Soil & Materials Engr.	46
Spancrete Midwest Co.	24
G.M. Stewart Lumber Co.	13
G.M. Stewart Truss	40
Sterner Lighting Systems, Inc.	Cover 4
Stockers, Inc.	42
Stremel Bros. Mfg. Co.	40
Temp Heat	44
Towle Co.	39
Twin City Testing	46
Twin City Tile & Marble Co.	14
Vincent Brass & Aluminum	48
Weidt & Assoc.	46
Wells Prestressed Concrete	18
Wunder-Klein-Donohue Co.	36



# Taking Thought with Prestressed Concrete



The frontier general store was the full-service retailer in its day. It sprang up and thrived wherever American civilization took it, from the early Jamestown settlements, to the California gold fields. From the Canadian fur territories to Texas cattle country. The general store was an institution out of which modern retail selling has developed.

Today, retailing has become so specialized that custom designed structures to house them are built for maximally efficient and profitable operation.

The Maid of Scandinavia building, constructed of Prestressed Concrete, is such a structure. Designed to combine mail order, retail store, warehouse and offices under one roof, the building has 2,000 square feet of floor space in three levels. 82,000 Square feet of Double-Tee floor and roof slabs were used. 2,000 Linear feet of Prestressed beams and 106 columns were used. The structure was both efficient and economical.

The Prestressed Concrete building units 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 Maid of Scandinavia building is a great source of pride for its owners and a convenience for its many customers.

**Project:** Maid of Scandinavia  
St. Louis Park, Minnesota  
**Architect:** Mastny/Paulsen, Architects  
Minnetonka, Minnesota  
**Engineers:** Bakke and Kopp, Inc.  
St. Louis Park, Minnesota

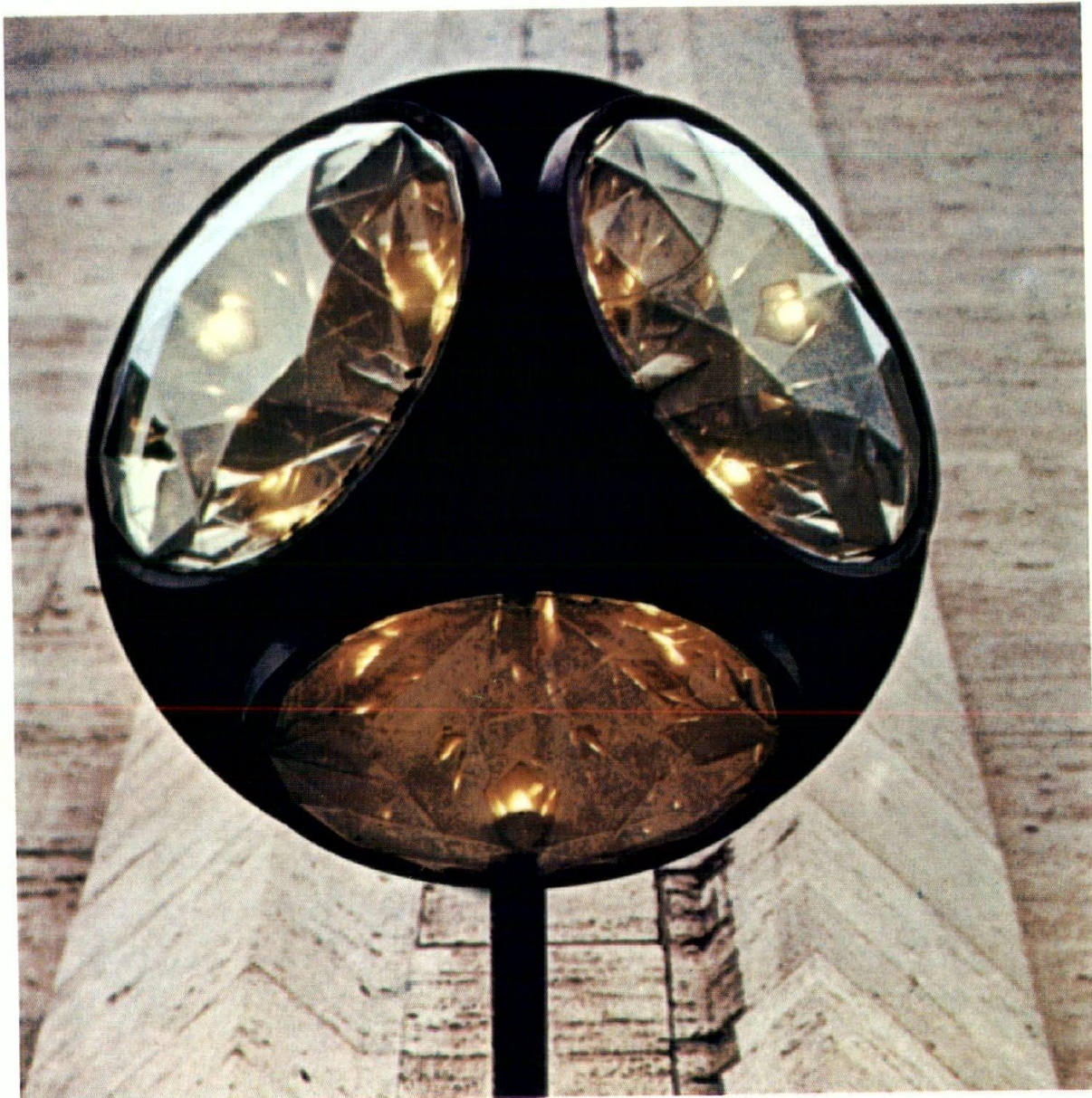
*The Thoughtful Designer will specify:*

**PRESTRESSED  
CONCRETE, INC.**



6755 Highway 10 N.W. • Anoka, Minn. 55303 • (612) 421-8900





**Sterner custom lighting. Next time your imagination runs away with you, we'd like to tag along.**

There's nothing we like better than accepting the challenge of turning your lighting concepts into reality.

The lighting fixture shown above, built for the New York State Theater at Lincoln Center, is a prime example. The architect, Phillip Johnson & Associates of New York, supplied the original lighting design ideas, and we delivered a quality-built system that included everything from the chandelier in the theater to the submersible floods in the fountain.

In addition to our custom design capabilities, Sterner offers a lighting library of outstanding fixtures... plus the expertise of our Simes and Infranor Divisions to help solve specialty lighting and floodlighting problems.

**JERRY CARNES  
ASSOCIATES**

Manufacturers' Representatives  
7036 Willow Creek Road  
Eden Prairie, Minnesota 55343  
612/941-5040

