

NORMANDALE STATE JUNIOR COLLEGE ARCHITECT: ELLERBE ARCHITECTS ANOTHER TOTAL ELECTRIC BUILDING NORTHERN STATES POWER COMP. a brighter life for you

NORTHWEST ARCHITECT

Official Publication of the Minnesota Society of Architects

VOLUME XXXIII NUMBER 6

September-October 1969

In this issue:					
Area Notes					4
An Area of Change Is Opportunity	 EC	ts.	٠		9
Minnesota Society of Architects' Convention					18
Convention Exhibitors					22
Honor Award Entries			٠	٠.	23
New Promise for the Northeast					34
Architecture and Northeast Minnesota					35
Book Reviews			٠		58
Thousand Oaks Competition					61
Products & Services				٠.	78
Index to Advertising					88

MINNESOTA SOCIETY OF ARCHITECTS

President Louis R. Lundgren, Hamm Bldg., Lower Concourse, St. Paul, Minn. 55102

Vice-president Leonard W. Anderson, 421 Wabasha St., St. Paul, Minn. 55102

Secretary Robert L. Ames, 445 City Hall, St. Paul, Minn. 55102

Treasurer William J. Miller, 7913 Southtown Center, Minneapolis, Minn. 55431

Publication Committee:

Bernard Jacob, Chairman John Cuningham O. D. Field Eugene G. Flynn Albert Hoffmeyer Herb Ketcham Ed Lofstrom Brian Morgan E. A. Sovik James Taplin

Robert W. Northrop Publication Manager Fred Miller, Jr. Associate Editor 646-2641

West Coast Representative:

Al Shonk, A. D. Shonk Co., 681 Market St.,
San Francisco, Cal. 94105 415-392-7144

Copyright © 1969 by the Northwest Architect.

BOARD OF DIRECTORS
Max E. Fowler, St. Paul
Norman K. Fugelso, Duluth
O. Reuben Johnson, St. Paul
Sanford Porter, Duluth
Ralph Rapson, Minneapolis
John G. Rauma, Minneapolis
Saul C. Smiley, Minneapolis
C. Everett Thorsen, Duluth
Wayne R. Winsor, St. Paul

Imm. Past President Willard L. Thorsen, Minneapolis

Executive Director Donald W. Hassenstab, 514 Foshay Tower, Minneapolis, Minn. 55402

Publication Office: 2642 University Ave., St. Paul, Minnesota 55114. Northwest Architect is published bi-monthly, with one additional issue in the month of January. Second class postage paid at St. Paul, Minnesota. Subscription: one year, \$3.00, two years \$5.00. Foreign rate \$4.50.

Advertising in Northwest Architect is subject to the approval of the Minnesota Society of Architects' Publication Committee.

Northwest Architect and its publishers disclaim any and all liability for statements made by authors in contributed articles.

Area Notes

Architectural News from Five States

PEOPLE . . .

Lonnie Adkins of Adkins-Jackels Associates, St. Paul, has been named to the board of trustees of the National Urban League. He is president of the St. Paul Urban League.

Lutheran **Edward A. Sovik** of Northfield was elected secretary of the largely Roman Catholic National Liturgical Conference at its recent liturgical week in Milwaukee. A translation of his article "What is Religious Architecture" from Faith & Form is to appear in an anthology on art and religion to be published by Les Editions du Cerf of France.

Bergstedt, Wahlberg, Bergquist Associates, St. Paul, have opened a new structural engineering department under the direction of **Robert J. Eaton**, formerly with Schuett-Meier Co. and Bruch and Morrow, Inc.

Fred E. Wilbur, Jr., has been named manager of construction administration, specifications and coordination by Grover Dimond Associates, St. Paul architects and engineers. Succeeding him as manager of architectural production is Gordon H. Edberg.

Robert A. Wilson has been named manager of product research for Ellerbe Architects, St. Paul. Roy B. Osterberg succeeds him as manager of the specifications department.

A South St. Paul native and graduate of the University of Minnesota, **Peter Woytuk**, has been named vice-president of Hugh Stebbins and Associates, Cambridge, Mass., architects.

Eldon O. Burow and Rodney L. Erickson have been named associates of Hammel, Green and Abrahamson, St. Paul architects.

Hans J. Wessel, executive engineer for the 3M Company, died of a heart attack on July 9. A graduate of the University of Minnesota, he was a member of the St. Paul chapter of the American Institute of Architects.

James I. Lammers, job captain with Grover Dimond Associates, left this fall for one year of graduate work in the Architectural Technology Program at Columbia University. He received the Holt Fellowship given by the City of New York and an AIA grant.

Anthony D. Schultz, Kenneth P. LeTourneau, Joseph A. Perry and Angelo A. Percich have been named associates of Beutow & Associates, St. Paul architects and engineers.

Two architects spoke at the second annual Community Goals Institute of Bloomington. **David Bennett**, Minneapolis, pointed to its formlessness: "Bloomington is a city of many accesses but no destinations." **Robert Faricy**, St. Paul, predicted the

continuing expansion of adult education. "Instead of the traditional 15 years of education we will have 30 years of it."

The Austin, Minn., firm of Ross Graves and Associated Architects has been approved by the Minnesota Department of Labor and Industry for an apprenticeship training program and by the Veteran's Training Program, the only one such outside the Twin Cities. It has recently moved into new quarters.

Proposals for an extensive "greenway system" to extend and enhance Minneapolis's parkways were a parting gift from **Lewis Crutcher**, former Portland architect who was for 16 months director of planning and research for the Minneapolis Park and Recreation Board. Crutcher has joined an architectural firm in San Francisco.

Former St. Paul architect **Eugene V. Schaefer** died suddenly June 27 in the nursing home he owned and operated in Ellsworth, Wisconsin. He was 72.

John W. Bray, of the Sheboygan, Wis., architectural firm of Lawrence Bray & Associates, was killed when his car collided with a freight train near there on August 19.

Former Racine, Wis., architect William M. Thompson has been named resident architect for Colonial Williamsburg.

A travelling exhibition, "A Place to Live," has been designed and constructed by members of the Western Section of the Wisconsin Chapter of the American Institute of Architects. There are walk-through simulations of forest, rural, urban, suburban and possible future environments. After a month at the Madison Art Center it will be circulated through other areas.

The Des Moines, Iowa, Register columnist Donald Kaul paid tribute to the late **Mies van der Rohe** for his Home Federal Building in "that sea of ugliness we call downtown Des Moines." A second Mies building is Meredith Hall at Drake University.

Waverly C. Ormond, formerly of Norfolk, Va., has joined Powers, Willis and Associates of Iowa City as project architect.

Edward H. Healy, Cedar Rapids, has been elected president of the Iowa Board of Architectural Examiners. Howard F. Bianco, Mason City, is vice-president, and Gerald I. Griffith, Des Moines, secretary-treasurer.

The name of the Sioux Falls, S. D., firm of Ralph Koch and Associates has been changed to Koch, Hazard and Associates, Architects, with the addition to the firm of Robert Hazard, also of Sioux Falls. Koch is president and Hazard secretary-treasurer of the South Dakota Chapter of the American Institute of Architects.

The new name of the Devils Lake and Minot, N. D., architectural firm of Kielhack, Fougner, Pickett and Hanson is **Architects Planners Associated** to reflect their more comprehensive services.

(Continued on Page 72)



Builder: Cooper Construction Co., Minneapolis, Minn

Windows for showplaces

Windows with a "showplace" look come from Marvin. Marvin is different. We do things that other manufacturers won't do to make beautiful wood windows easier to get, easier to install, and easier to use in beautiful, out-of-theordinary ways. For instance, we offer the most styles, sizes, and options of any manufacturer, and deliver them set up to local jobbers within 10 days of order. Call or write us and we'll tell you some other things you need to know about windows for showplaces.

FREE! Send for our colorful new literature and learn the Marvin secrets that help you use wood windows in beautiful ways — that sell showplaces.





"BUILT FOR NORTHERN WINTERS AND SOUTHERN CHARM"

MARVIN WINDOWS • WARROAD, MINN. 56763 • (218) 386-1430



STOP RUBBING CONCRETE!

THORO PRODUCTS waterproof-finish concrete economically

Finish and waterproof concrete without the high costs of labor and materials. An outstanding example of Thoro Products at work is this Arkansas building which had all concrete surfaces sprayed with THOROSEAL PLASTER MIX, a cement-base, waterproof coating. ACRYL 60 was added for superior bond. Now, this building is protected and attractive for years to come.

CONPRO, INC.

University at 30th Avenue N.E.

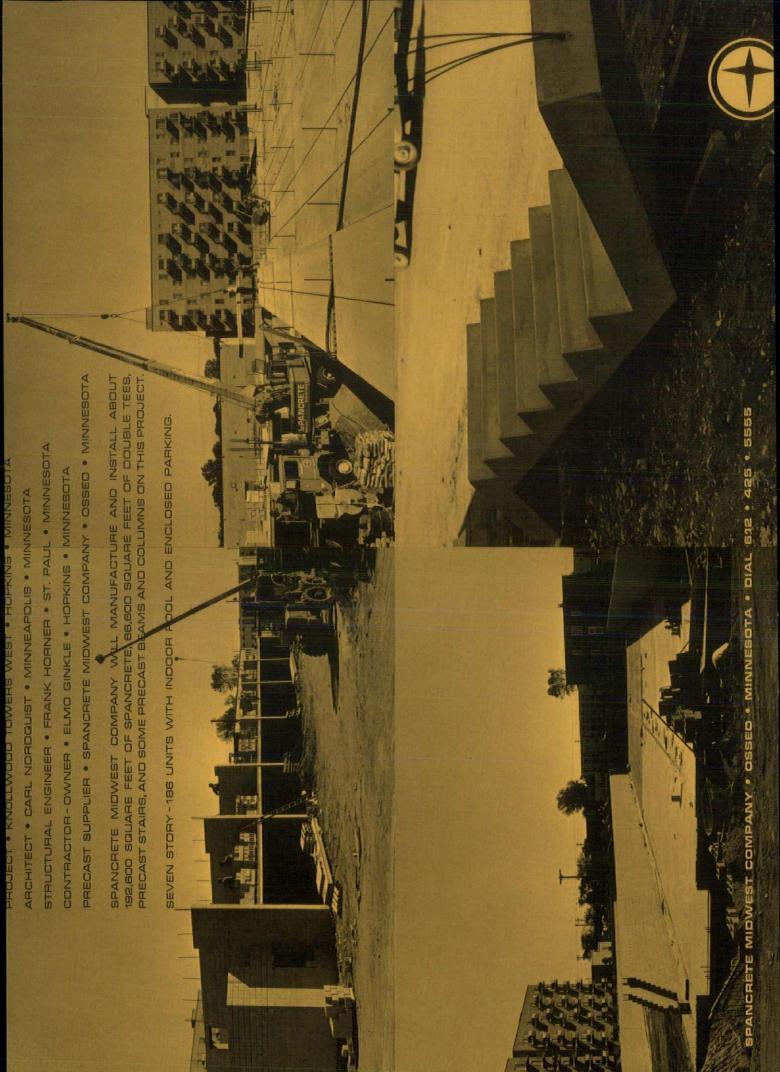
(612) 781-9583

Minneapolis, Minn. 55418

GENERAL CONTRACTOR . WATSON CONSTRUCTION CO. . MINNEAPOLIS . MINNESOTA PRECAST SUPPLIER . SPANCHETE MIDWEST COMPANY . DSSED . MINNESOTA PROJECT . INTERNATIONAL PAPER COMPANY . ARDEN HILLS . MINNESOTA ENGINEERS • CASSIS ASSOCIATES INCORPORATED • ST. LOUIS • MISSOURI

SPANCHETE MIDWEST COMPANY MANUFACTURED AND INSTALLED 32,305 SQUARE FEET OF INSULATED DOUBLE TEE WALL PANELS ON THIS PROJECT.





An Area of Change Is Opportunity

By Donald Hassenstab

Executive Director, Minnesota Society of Architects

Change in natural and man-made environments is eternal and the changes which have come, and will come, to Northeastern Minnesota, where our members in the Northeast Minnesota Chapter practice, present opportunities of many kinds. Architects of the area have always taken changes in stride and the presentation in this issue of Northwest Architect

proves they have built to advantage!

However, there is no rest. What they have achieved is very creditable. When a city had to be moved, they helped in the plan and execution of the move. When the Depression struck the nation their area suffered; yet they kept up their practices and worked on painfully restricted budgets to keep at least a modicum of construction going, helping others in the construction industry do what was humanly possible. The designs which came from that period have weathered the years very well.

Depletion of Iron Range reserves of rich ore cast very deep shadows across the economy of northeastern Minnesota but there again architects and others in the construction industry of the area helped bring about needed change and saw the opportunities for growth in those inevitable changes. Again they contributed to

growth.

The future has its goodly share of sometimes frightening changes. There are the rises and drops in the whole economy which Northeast Minnesota architects must share with the country as a whole, aggravated or lightened by the peculiarities of their particular region. There is the growing menace to environment of pollution, every kind of it, and architects, as guardians of man's environment, must take a major part in solutions to be worked out.

Location of this part of the state has created some special changes to be reckoned with by architects. Conservation of a famous forest area in connection with the possible creation of the Voyaguers National Forest, tourism created by this unique outdoors and the delicate balance of wilderness and industrialization potentials for optimum good of the residents of the area are typical. Growth of the area as the Head of the Lakes seaport region opens new horizons.

It is obvious the changes will continue to be many for our friends in Northeastern Minnesota. It has been obvious they have been equal to those of the past. So, much success to them in the future—perhaps their successes can help show the way for us, for all of us!

SLAYTON TO SUCCEED SCHEICK IN AIA

William L. Slayton, president of Urban America, Inc., has been appointed executive vice-president of the American Institute of Architects by its Board of Directors to succeed William H. Scheick, FAIA. Mr. Slayton will move to the AIA position by the end of the year, according to an announcement by Rex W. Allen, FAIA, AIA president. Mr. Scheick, executive director since 1961, will remain with AIA on a

special assignment basis.

"Bill Slayton will bring to his new job extensive experience and involvement in the nation's urban problems," Mr. Allen said. "He will use this background to organize and direct the growing number of Institute activities related to the urban scene. On the local, state and national levels AlA has become increasingly involved in public and social issues. As executive vice-president, Bill Slayton will give added impetus and direction to AlA programs directed toward broader concepts and a higher level of environmental design, as well as expansion of professional development.

"Bill Scheick, as executive director for nearly a decade, has seen the AIA through a period of

tremendous change. His effective guidance of the organization during this period of rapid growth has helped make it possible for the architectural profession to move into a new era."

Mr. Allen noted that Mr. Slayton will be the first non-architect since 1949 to serve as executive staff director of AIA. He said this fact symbolizes a broadening of Institute programs, which in the past have been primarily directed toward improvement of the professional performance of architects.

"AlA's new broader policy will continue to stress the architects' expanding role in the creative process which will realize the highest human goals for the physical environment," Mr. Allen said. "Achievement of these goals demands equal stress by the AlA for its responsible involvement in areas which shape the physical environment and influence the creative process—the human and physical sciences, economics, politics, and public education. National developments in these areas extend into the realm of public policy and Mr. Slayton's implementation of AlA's broader objectives will take architects more effectively into the processes of public decision-making."



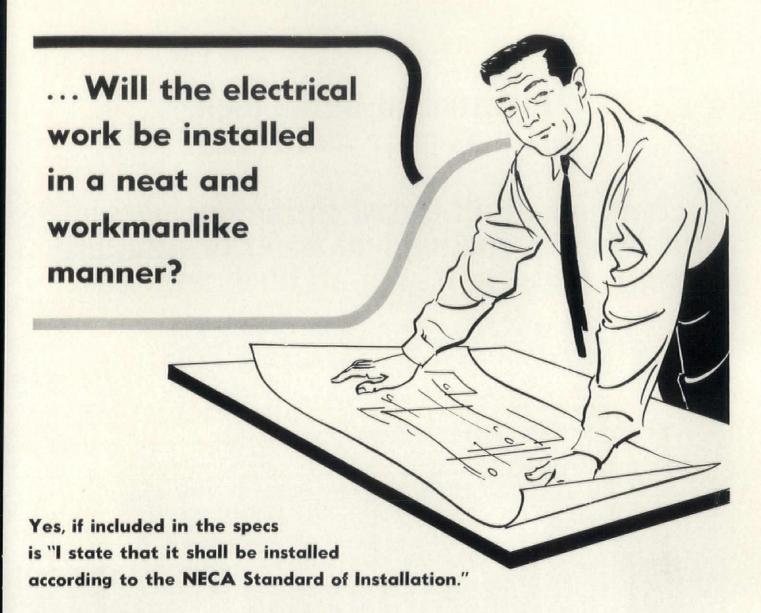
If you are one who bemoans the commonplace, come see the new headquarters of Globe Office Furniture, where an imaginative total design concept opens new horizons for business, resi-

dential and institutional interiors.

Globe's total design concept is just that - a total service including consultation, planning, development and execution.

GIODE OFFICE FURNITURE / 4200 Olson Hwy. / Minneapolis, Minn. 55422

Georg Jensen's international collection of contemporary lighting and award winning furniture designs / Stendig chairs — original classic designs / Fritz Hansen Danish furniture designed by Arne Jacobsen / Unika original "Rya" area rugs / Omni original vertical space-maker systems / Dunbar / Marble/Imperial / Harter / Jofco / Robert John / Metropolitan / Corry Jamestown / Art Woodwork Limited.





THE NECA STANDARD OF INSTALLATION:

- is a reference and guide to good workmanship in electrical construction.
- defines such terms as "installed in a neat and workmanlike manner" or "firmly secured in place" that are frequently used in design specifications and codes. It is offered as an interpretation of these terms and may be used by the designer to describe the type of installation he desires for his client.
- is not a design specification and neither approves nor restricts the proper use of any material.

WRITE FOR YOUR COMPLIMENTARY COPY

NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION

Minneapolis Chapter 2101 Hennepin Ave. Minneapolis, Minn. 55405 377-4000 St. Paul Chapter 608 American Nat. Bk. Bldg. St. Paul, Minn. 55101 224-3377 Dakotas' Chapter 509 25 Ave. No. Fargo, N. D. 58103 232-3291 Twin Ports—Arrowhead Chapter 25 N. 12th Ave. E. Duluth, Minn. 55805 728-4481

Everyone at Burke High has a \$5 price on his head.

That's about all it cost Burke per person for heating, cooling and water heating last year. Because it was all done with gas.

And note, too, that "last year" does not mean 180 days—at Burke High it means 274! This is an abnormally high-use facility—for meetings, athletic tournaments, community functions and private rentals—in addition to six day weeks, 11 months school use. You can be sure Burke High in Omaha is glad it has gas energy!

In its first full year of operation, Burke's total gas bill ran \$8,306—for heating and air conditioning the entire building, plus heating water for the cafeteria and washroom facilities. For an entire year of 274 days. Not bad for a school of 1,450 students and a staff and admin-

istration numbering 100 or more. Divide the total gas bill by this number of occupants and you come up with a remarkably low cost per person per year of \$5.37!

One last point. There are 12 fully airconditioned public schools in Omaha. Nine are air-conditioned with gas. What was that we said about keeping a close watch on cost?

Your gas company representative has a few choice words for you about how much you can save by going with gas. Or you can get the story from R. J. (Bob) McChane, Northern Natural Gas Company.



Leo A. Daly Co., Omaha, Architects-Engineers-Planners





Accent the spectacular with Ceco's Curtainwall

Northwestern National Bank Building, Saint Paul, Minnesota Housing and Development Authority of the City of Saint Paul, sponsors L. J. Sheridan & Company, developers/Capital Centre Associates, owners Northwestern National Bank, major leaseholder Grover Dimond Associates, Inc., architects-engineers Naugle Leck, Inc., general contrac.or

experience

This is the Northwestern National Bank Building of St. Paul, in the Capital Centre . . . an exciting part of an architectural revitalization program encompassing 12 blocks of the downtown area. The Northwestern bank is modern, functional, colorful, and beautiful to behold. Ceco experience in curtainwalls played a vital role in bringing the architect's concepts into reality.

Ceco developed and manufactured a "strip" curtainwall system for the tower portion. Vertical sight lines are created by strip windows and panels alternating with precast stone panels. Steel mullions and insulated panels surround

fixed windows . . . all permanently clad in dark brown polyvinyl chloride, an impervious finish called Cecoclad.

Both lower levels are enclosed with Ceco custom steel curtainwalls, with the "skyway" banking-floor portion using windows 18' high, 14' wide and 15" deep. Huge sharp-cornered panels using 1/4" steel plate were included.

You can be sure of accuracy and quality worthy of your most exciting design by including Ceco Experience in your next building. The Ceco Corporation, district office: 2900 East Hennepin Avenue, Minneapolis, Minn. 55413.



UNIVERSITY OF MINNESOTA HEALTH CENTER Minneapolis, Minnesota Architect: Ellerbe Architects Confractor: Borson Construction, Inc.

Our Commercial Millwork Department, managed by Mr. Don Bleise, includes a corps of draftsmen and estimators with a thorough understanding of architecture and the architect's challenges.



SHERATON-ROCHESTER HOTEL Rochester, Minnesota Architect, Kilstofte and Voseipka Contractor: Sheehy Construction Co.



KINDEM'S COMMERCIAL MILLWORK DEPARTMENT

Service to Architects and Contractors Through

Intelligent Specifications, Quality Products

and Prompt Delivery

HI-RISE HOME FOR ELDERLY Project 1-14, St. Paul, Minnesota Architect: Bergstedt, Wahlberg, Bergquist and Associates Contractor: Knutson Construction Co.

Our planning, designing and drafting department is at your service—to save you coun less man-hours in formulating specifications and helping you choose the millwork bes suited to your particular project.

We would be pleased to show you our extensive file of participating jobs where it habeen our privilege to work with architects in supplying wood windows, interior an exterior doors, mouldings and other architectural woodwork. Your inquiries are invited Call Don Bleise at 884-3561.



4141 PARKLAWN AVENUE EAST APARTMENTS Edina, Minnesota Architect: Miller, Melby and Roberts, Inc. Contractor: Kingbay Construction Co.







MORGAN

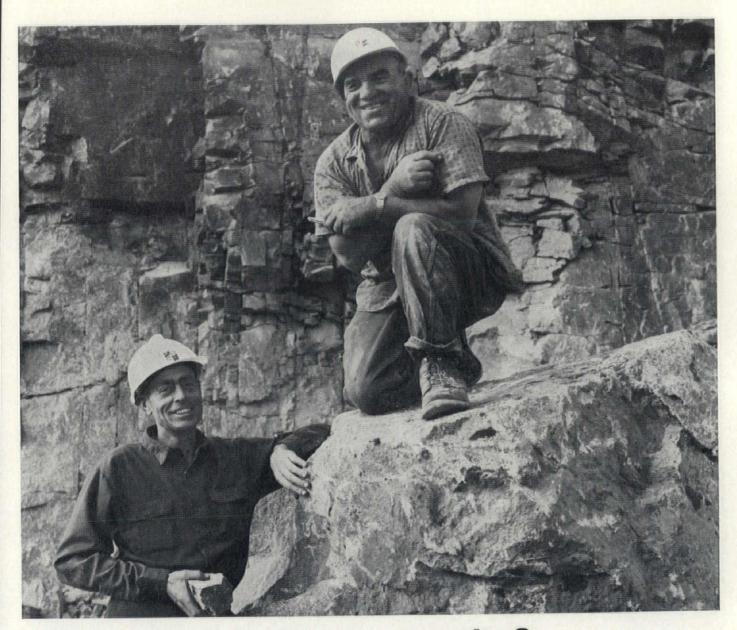
ANDREW A. KINDEM AND SONS, INC.

83rd and Grand Avenue South

Minneapolis, Minnesota

884-356

Serving Architects and the Construction Industry over 22 Years with R. O. W. and Caradco Wood Windows, Morgan Doors, and a complete line of stock and custom millwork.



Blarney stone in your granite? Talk to Arnold Henz or Roman Kuklok.

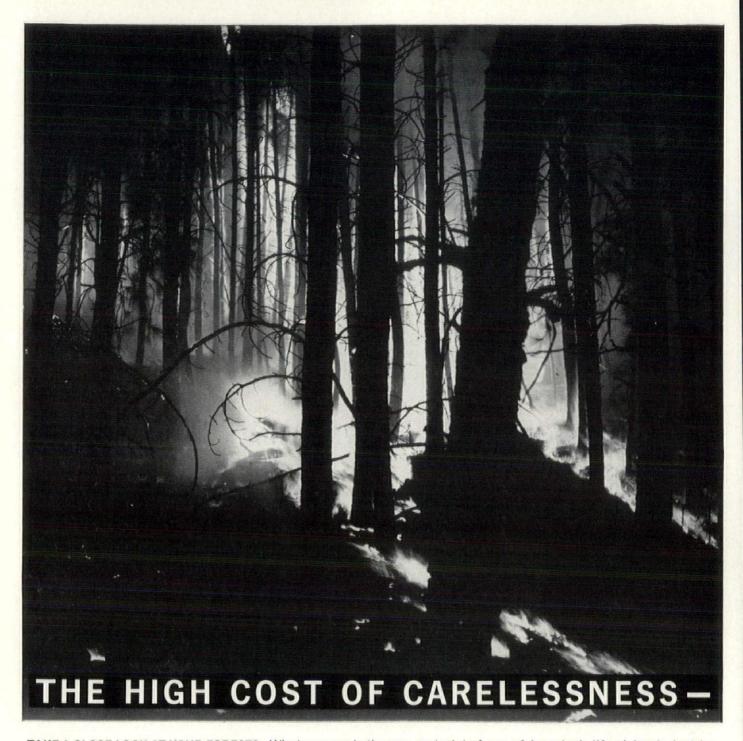
Chances are, it wasn't Arnold Henz or Roman Kuklok who slipped it in ... but they both probably know the Irishman who did!

They're both old pros, and not much goes on around Shiely's granite quarry in St. Cloud that they don't know about. Shiely granite has been Arnold's business for the last 24 years. He was at the quarry the day it opened in 1945. Roman took his first look at the quarry 18 years ago and has been a granite man ever since.

With the help of old pros like Arnold and Roman, our St. Cloud granite quarry has become the biggest producer of commercial crushed granite in the area. Railroad ballast, bridge decking, river bank protection, streets . . . wherever absolute top quality aggregate is called for, Shiely granite is there to do the job. It's one of the 27 varieties of commercial aggregate available from Shiely.

And if a Blarney stone or two shows up in your next load, don't blame Arnold or Roman . . . it was probably the same guy who threw the overalls in Mrs. Murphy's chowder.





TAKE A CLOSE LOOK AT YOUR FORESTS. What you see is the raw material of one of America's life-giving industries Forest products and their derivatives provide income and jobs for millions of people throughout the United States. ■ Yet, last year, over seven million acres of precious forest and range lands went up in flame.
■ Nine out of ten forest fires are started by people . . . people who are careless. The loss is shared by all of us. • What can you do about it? Urge your employees and the people in the communities in which you do business to be careful with fire-every kind of fire-and to remember the basic rules: Always hold matches till cold! Be sure you drown all fires out! Crush all smokes dead! Remember whoever you are, whatever you do . . .

Material for posting on your bulletin board available from CFFP-FOREST SERVICE DIVISION, U.S. DEPT. OF AGRICULTURE, WASHINGTON, D. C. 20252.



Please! Only you can prevent forest fires

Published as a public service in cooperation with The Advertising Council

THURSDAY

NOVEMBER 6

10:00 - 11:00 A.M. 12:30 - 2:00 P.M.

MSA BUSINESS SESSION
LUNCHEON SPEAKER
HUBERT H. HUMPHREY

3:00 - 5:00 P.M.

FIRST SESSION
PANEL DISCUSSION
NEAL B. MITCHELL
TAYLOR CULVER
JOHN J. OROFINO
HUD REPRESENTATIVE

AFTERNOON WOMEN'S TEA GOVERNOR'S MANSION

5:00 - 6:30 P.M.

EVENING COCKTAILS and BUFFET IN EXHIBIT AREA

6:30 - 8:30 P.M.

EVENING CONTINUATION
OF PANEL DISCUSSION

FRIDAY

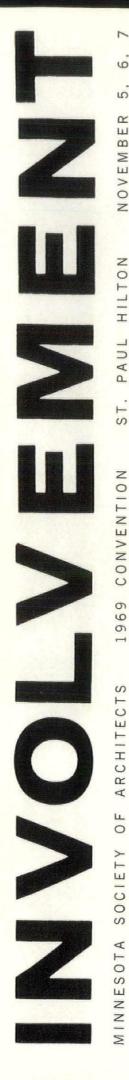
NOVEMBER 7

9:30 - 11:00 A.M. 12:30 - 3:00 P.M. MSA BUSINESS SESSION LUNCHEON SPEAKER STEWART L. UDALL

6:30 - 7:30 P.M. 7:30 - 12:30 P.M. PRESIDENT'S RECEPTION
AWARDS BANQUET AND DANCE

NESOTA SOCIETY OF ARCHITEC 19 69 CONVENTION PAUL HILTON NOVEMB S

N N



INVOLVEMENT today is not just an activist's slogan. It does not belong just to the students, the blacks, the clergy, the poor—

INVOLVEMENT means life now!
The government, the church, the school, the theater, the arts and the family.

INVOLVEMENT

To give sharper focus to the architects' involvement is therefore the aim of this convention.

THE THEME

Because the great problems facing our society are the architects' problems.

Because if an architect's work is to be meaningful, it must occur in the context of society's needs.

Because if an architect's work is to be meaningful, it must help solve the crises confronting our society.

SPEAKERS

The speakers are all men deeply involved and committed.

Francis D. Lethbridge, the keynote speaker, a partner in the firm of Keyes, Lethbridge & Condon, Washington, D. C., and Vice President of the National AIA, will speak directly to the theme. From his vantage point in Washington, he will talk about relevant AIA programs and policies and his own work in community planning and construction.

Hubert H. Humphrey, Professor and formerly Vice President of the United States, will address the convention about the problems, the cancers as he calls them, confronting us.

Stewart L. Udall, Chairman of the Board of the overview group, and former Secretary of the Interior, will tell of the Overview group which "dedicates itself to the kind of planning—and more important, follow-through by social, economic, and political implementation—required to produce and sustain a better habitat for man."

Neal B. Mitchell, a systems engineer from Boston, Mass., and developer of the Mitchell system of modular construction. Mitchell is also a professor at the Harvard Graduate School of Design and has been a consultant to industry on building systems.

Philip Johnson, distinguished architect, critic, historian and, above all, an extremely articulate spokesman for the profession today.

Taylor Culver, President of the Association of Student Chapters of the AIA and a recent architectural graduate of Howard University. Culver played a prominent part in this year's National AIA Convention in Chicago.

John J. Orofino, an architect from Washington, D. C., will bring first hand comments on his involvement in the rehabilitation and development of low income housing in Washington, D. C.

Representatives from large industries, such as Aerojet General, General Electric and Jones and Laughlin, will discuss "Industrialization in Architecture" and their relationship and work with the architectural profession. These presentations should give insight into the type of proposals recently submitted to the Department of Housing and Urban Development (HUD) under "Operation Breakthrough."

In order to enable the audience and the panelists to freely exchange ideas and make the discussion more rewarding, the Thursday evening session will be open ended and may last as long as is warranted at the time.

Slides from all the 114 submissions to the 1969 MSA awards program will be shown, giving the membership a chance to see representative current architecture in Minnesota.

The seven award winners chosen by the jury consisting of Philip Johnson, Ulrich Franzen, and Edward L. Barnes will be on display. Slides will also be presented of the 1969 National AIA Design Award winning projects.

Z

NESOTA

S

OCIETY

0

П

AR

CHITECTS

-

9

9

9

CONVENTIO

PAUL

HILTON

NOVE

MBER 5

5

EXHIBITORS NOILUM NUC

A.C.S. Engineering Sales Aglite Inc. Allied Equipment Alpana Aluminum Products, Inc. American Artstone Company American Institute of Steel Construction American Linen Supply Company American Seating Company American Tube & Controls Anchor Block Company Andersen Windows Anderson-Ladd, Inc. Apollo Sales Architectural Metal Association of Minnesota Architectural Woodwork Institute Minnesota Chapter Armco Steel Corporation

The Babcock Company Bartley Sales Co., Inc. Bentonize of Minnesota Bladholm Bros. BMD&R Lighting Brock White Company Building Products, Inc.

The Cambridge Tile Manufacturing Company
Rollin B. Child, Inc.
Cole-Sewall Engineering Company
Cold Spring Granite Co.
Columbia Industries, Inc.
CONPRO, Inc.
ConTech, Inc.
Cronstroms Manufacturing, Inc.

Daytons Contract Division
Design Products, Inc.
DeVAC
Dormond Industries Ltd.
D. R. Dunham, Inc.
Dur-O-Wal of Minnesota, Inc.

Edwards Sales
Executone Systems of St. Paul,
Inc.

Chas. M. Freidheim Company H. B. Fuller Co. Gabbert's Business Interiors
General Coatings Inc.
General Office Products
Georgia-Pacific Corporation
Gillis Quarries Ltd.
Glenmar Company
Glenway Supply Ltd.
The Glidden-Durkee Division of S.C.M.
Goodwin Companies
Gopher Stone Company
Grams Incorporated

Haldeman-Homme, Inc.
W. L. Hall Company
Hauenstein & Burmeister, Inc.
Hebron Brick Company
Holland Plastics Company

Insulation Sales Co.

Bart Jordano, Inc.

Kawneer Company, Inc.

Lake Street Industries, Inc. Libbey-Owens-Ford Glass Company

MacArthur Company
Mahin-Walz, Inc.
Manitoba Export Co.
Howard B. Marks Company
Marvin Windows
Meloche Sales Company
The Miller Company
Minnesota Brick & Tile Company
Minnesota Conference NECA
Minnesota Lathing & Plastering
Bureau
Minnesota Natural Gas Co.
Mohawk Carpets
Molin Concrete Products
Company

NADCO Corp. Neidhoefer & Company Neuman Millwork Ltd. Curran V. Nielson Company, Inc. North Central Lightweight Aggregate Company Northern Natural Gas Company Northern States Power Company

Ochs Brick & Tile Company

Pacific Mutual Door Co.
The Charles Parker Company
Patek Wallcovering
Pefco Inc.
Pella Products, Inc.
PPG Industries, Inc.

Rubble Stone Company, Inc.
Rubble Tile Distributors
Roto Swing Door Company, Inc.

S. A. Design Ltd.
Saewert Corporation
St. Charles Kitchen of Minnesota
St. Paul Book & Stationery
Company
St. Paul Piping Industry
Sanford Associates, Inc.
Snow-Larson, Inc.
Spancrete Midwest Company
Sperry Office Furniture Compan
Structural Wood Sales Company
Symons Manufacturing Compan

Titanaloy—M & H Zinc
Trussbilt
Twin City Tile & Marble Compan

United States Plywood

Valspar Paint Vincent Brass & Aluminum Company

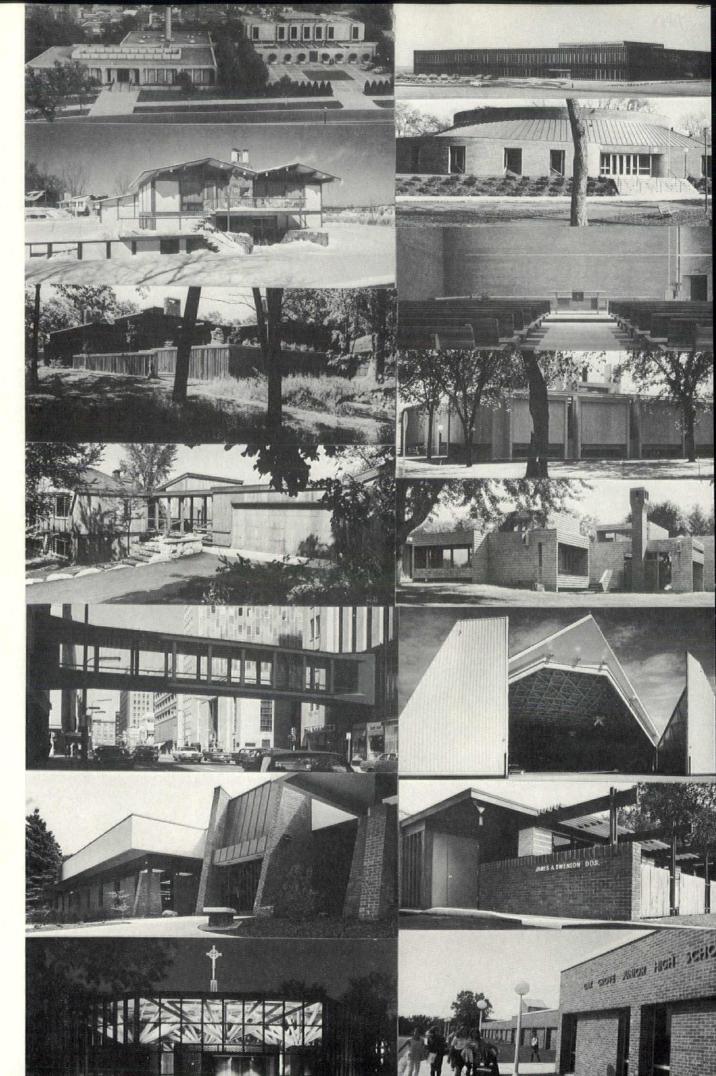
Warners Industrial Supplies Washington National Insurance Weyerhaeuser Company

Youngblood Lumber Company

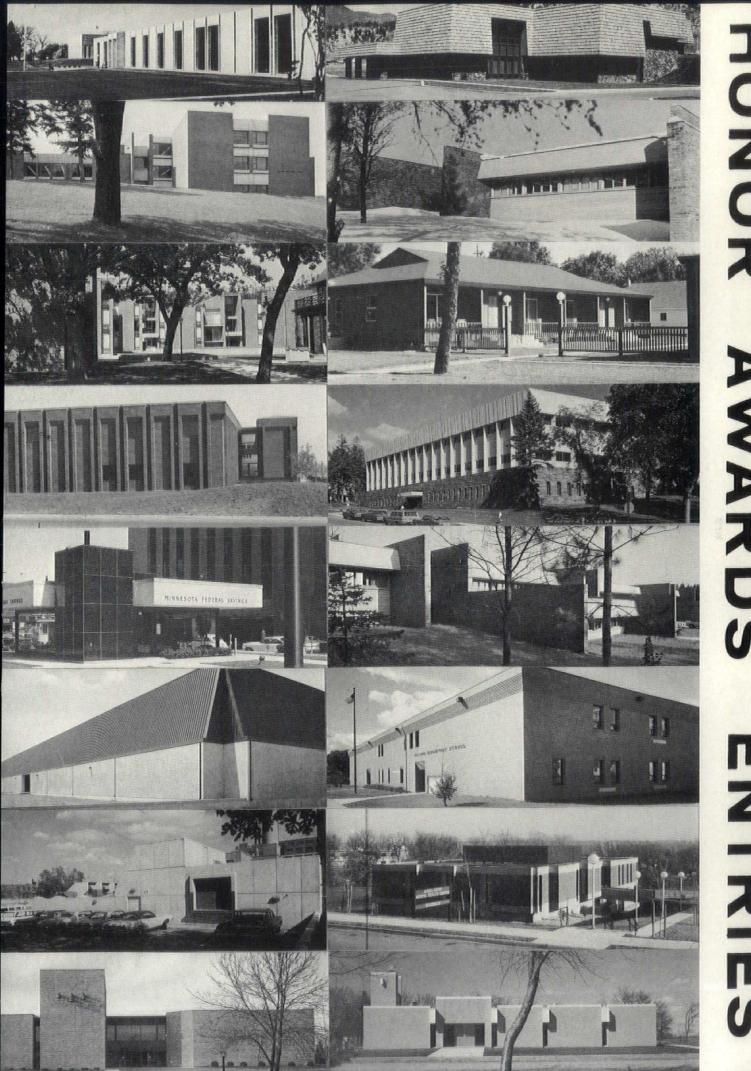
Zenith Glazed Products
Zonolite—Div. of W. R. Grace &
Company

HONOR AWARDS ENTRIES

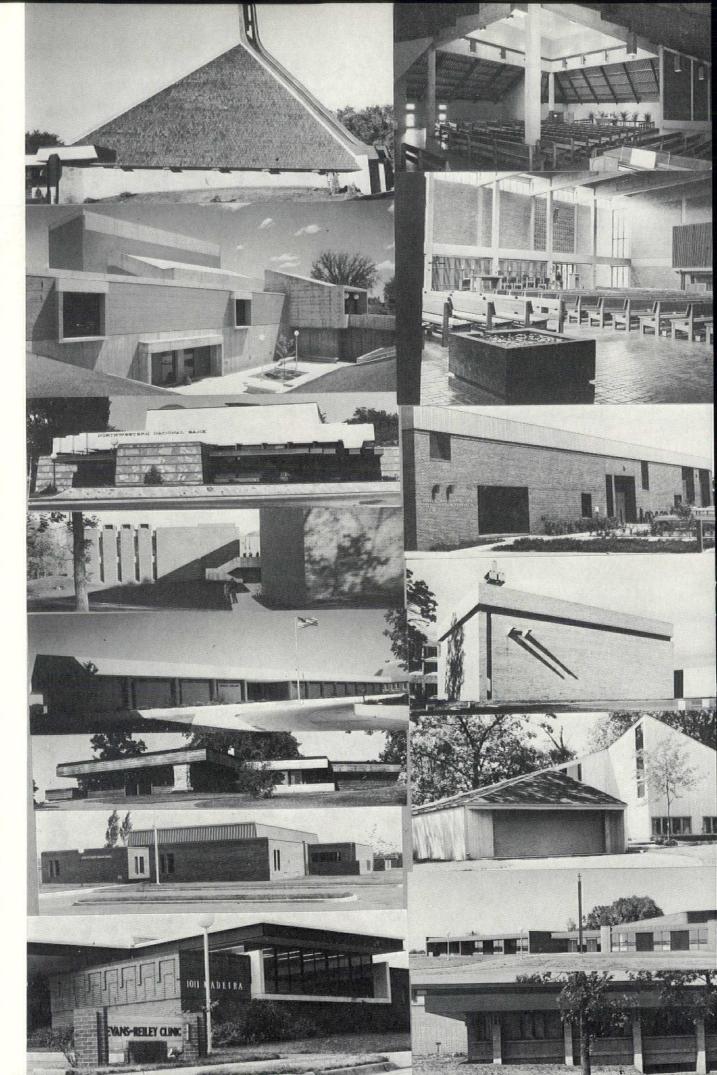




HONOR AWARDS ENTRIES



ENTRIES AWARDS HONOR



PANERS provide total design flexibility

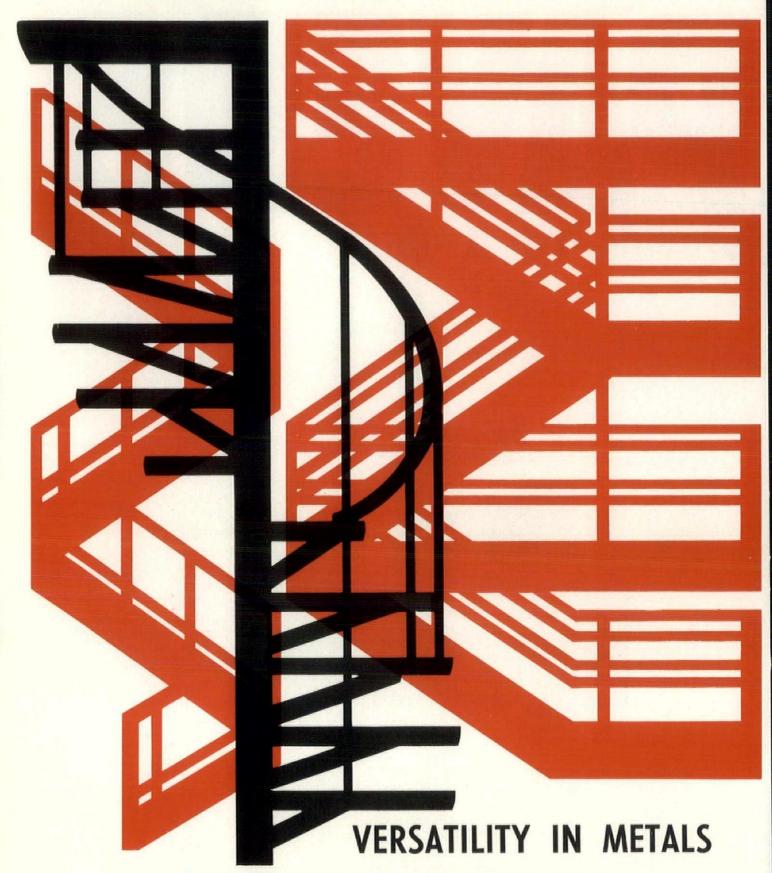
Charm, quiet, relax, fun, stroll, falling leaves, solitude, spring time, romance. Paving brick often goes a long way to help set the mood - inside or out, floors or walls. We offer these solid units in wire-cut, vertical fiber, non-slip surface in modular or standard length and width. Colors: red, buff, brown, gray, flashed and glazed to fit any design application. Sizes: 15/8" split, 21/4" regular, 41/2" jumbo. Meets ASTM C-410. The next time you want to set a mood, think about taking a walk on brick.



TWIN CITIES SALES DIVISION

268 S. Plaza Bldg., Gamble Ctr., Minneapolis, Minn.





- * USE ASSOCIATION FABRICATORS-QUALITY ASSURED
- ★ TECHNICAL ASSISTANCE 926-4393



ARCHITECTURAL METAL ASSOCIATION of MINNESOTA

4725 Excelsior Blvd.

926-4393

Minneapolis, Minn. 55416

NORTHWEST ARCHITECT

SHIELY KEYSTONE BASE

CASE REPORT No. 37 Heavy Industrial Terminal

Parking lot, access roads, maintenance area, for new office rarking lot, access roads, maintenance area, for new of and maintenance facilities being built by Acton and maintenance facilities being built by Acton, which Construction, Hugo, Minnesota, near 35E. Acton, which designs and constructs sewage treatment facilities has plants located throughout the United States. JOB DESCRIPTION: plants located throughout the United States.

PERSONNEL:

Project Engineer: Joe Davis Job Superintendent: Jerry Arendt J. L. Shiely Co. Representative: John Palda

DESIGN CONSIDERATIONS:

- · Surface must withstand frequent and heavy use by heavy equipment.
- Presence of extremely poor subgrade soil-AASHOA-6, a heavy clay material that varied considerably in different areas of the site.
 - of MACO. CLASS I SHOW BASE O Must have access to the area during construction without the cost of a bituminous surface course.
 - Must withstand severe freeze-thaw cycles of Minnesota
 - Must remain stable despite heavy rains.

APPLY OVER THE COMPACTED SUBGRADE, A CRUSHED AGGREGATE APPLY OVER THE COMPACTED SUBGRADE, A CRUSHED AGGREGATE BASE CONFORMING TO THE 1968 MINNESOTA STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION, SECTION 3138.1, CLASS 2 AGGREGATE AND PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 2211. SPECIFICATION: Class 2 Aggregate Base

Timmumi,

19" Same - GRAVELY - CLOY FAIL MATERIAL

Corrected A-6 Supergres Son

RATIONAL:

Shiely Keystone base was specified primarily because of

the following factors.

a) COST. Even though crushed stone was more expensive per ton than class 4 and 5 sand and gravel, a thinner course was used for a lower overall cost.

b) EFFICIENCY. It was possible to achieve specification with fewer passes of the roller and less

c) HANDLING. Through use of crushed stone, less mathereby less material was transported and handled.

d) CONSISTENCY. Being a manufactured product, consistency of material was assured.

e) DRAINAGE. Access to job was maintained throughout a period of heavy rain because of excellent drainage. Site remained high and dry throughout.



J. L. SHIELY CO

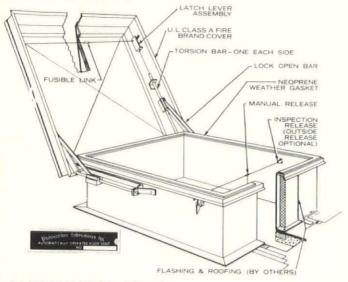
Quality Commercial Aggregates Ready Mixed Concrete 1101 Snelling Ave. N. Phone 646-8601 St. Paul, Minnesota 55108

FIRE VENTING

WITH NEW WASCO PYROVENT

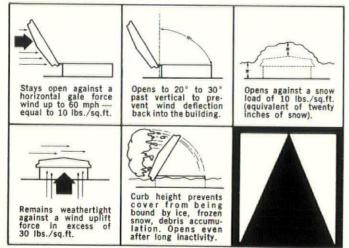
NOW, FOR THE FIRST TIME . . .

AN UNDERWRITERS' LABORATORIES APPROVED FIRE-VENTING UNIT THAT IS GUARANTEED TO OPEN . . . EVEN UNDER MORE THAN A FOOT-AND-A-HALF OF SNOW.



CONSTRUCTION FEATURES:

- · All aluminum, insulated cover.
- · All aluminum welded body, curb assemblies and hardware.
- Carbon steel torsion bars with a protective polyvinylchloride cover.
- . Low silhouette . . . and clear, uncluttered well.
- Entire activating mechanism (except for fusible link) located under the curb, protected from weather, tampering and vandalism.
- Minimum well opening not less than 4 feet on any side (as recommended by most authorities).
- . Minimum height from roof to bottom of vent cover is 12 inches.
- Optional: outside manual release and solenoid activated release.



For details, refer to Sweet's Architectural File (22a/w)

WITH VAN-PACKER GREASE DUCT SYSTEM

... WITHIN THE NEXT 24 HOURS
39 RESTAURANTS
WILL BE HIT BY FIRE!

34% will be grease fires in cooking equipment, hoods, and ducts.

Reason is that nobody—virtually nobody—has a regular maintenance schedule for cleaning built-up grease and lint out of their cooking exhaust systems. The job's just too messy.

VAN-PACKER INTRODUCES ENTIRELY NEW KIND OF GREASE DUCT

You can't change the human nature that allows this shocking national statistic. So Van-Packer created an entirely new kind of ductwork. It is a grease duct system that is built to withstand periodic fires! No danger. No damage. A fire simply cleans out the flue.

TESTED BY BOSTON FIRE DEPARTMENT

In a Boston Fire Department test a grease fire raged for 40 minutes inside the new Van-Packer grease duct. Although the inside temperature soared to 2185°F, the outside temperature never exceeded 200°F. Seven tests were made, with similar results.

GREAT NEWS FOR THE DESIGN ENGINEER

After the Van-Packer system's amazing Boston performance, the National Fire Prevention Association was asked to modify their requirements. Now a design engineer can run his risers inside or out. He'll no longer have to build a 4-inch masonry shield. He won't have to place his ducts 18 feet from combustibles. There will no longer be a need to build in automatic fire extinguishers, or for cleanout doors every 20 feet.

LOWER FIRE INSURANCE COSTS

Penalties for improper kitchen ventilating systems can increase insurance premiums hundreds, even thousands of dollars, a year. Preliminary investigations indicate that the Van-Packer system can appreciably lower insurance premiums.

BUILDING? REMODELING? GET THE FACTS!

A Van-Packer grease duct system is the safest there is. Engineering design is a cinch. Assembly is fast, easy.

Distributed By

MACARTHUR COMPANY - 936 Raymond Ave., St. Paul - (612) 646-2773

See Us at Booths No. 130 & 131

14 Story High Rise



Housing for the Elderly Minnesota Project #1-13

Architect: Cavin & Page Contractor: Adolfson & Peterson, Inc.

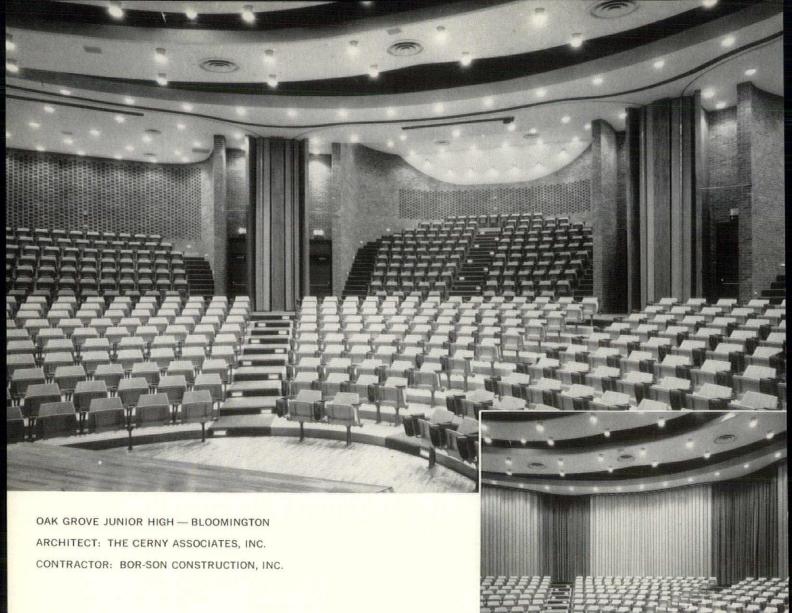
Owner: St. Paul Housing & Redevelopment Authority

This building is the highest in the U. S. using brick bearing walls and prestressed concrete hollow core plank construction. Over $90,000~\Box'$ of $6'' \times 16''$ Flexicore plank is being used on this project, which is now on the 11th floor. Each floor contains approximately $7000~\Box'$ of floor area and is being erected at the rate of one floor every 7 days. The erection of the floors is a continual process, as the bricklayers have an immediate deck to work from to start laying up the walls for the next story before the Flexicore erection is completed on the present one. This adds up to efficiency and speed in construction, which equals savings in the cost of the entire project. Next time think *FLEXICORE FIRST!*

Molin Concrete Products Co.

Since 1897

885 W. Minnehaha Ave. St. Paul, Minn. 55104 488-2541



Auditorium-Lecture Hall Area . . . can be instantly changed in shape and size to provide *one*, *two*, *three* or *four* teaching stations!!

MODERNFOLD'S AUDIO-WALL

was used for the operable wall system.

STOP BY AND SEE THE VERY LATEST

MODELS OF OUR GRILLE COIL-WAL

AT THE A.I.A. CONVENTION

BOOTHS 105 AND 116

Your number one source of folding partition and operable wall systems!

Phone: 935-7759

MAHIN-WALZ, INC.

4309 Shady Oak Road Hopkins, Minnesota

ELECTRIC MACHINERY MFG. COMPANY

ST. CLOUD, MINNESOTA

Engineer: Clark Engineering Company—Minneapolis, Minn. Architect: Patch & Erickson, Inc.—Minneapolis, Minnesota Contractor: D. L. Witcher, Inc.—Minneapolis, Minnesota



The 88' x 624' industrial area and 40' x 408' office area are framed in prestressed concrete panels.

8' x 24" x 45' insulated double tee wall panels frame the industrial area. Eight bolted clamp connectors secure each panel to the steel frame. Ties between interior and exterior concrete surfaces, separated by 2" styrofoam, received special treatment to allow for differential movement. 8' x 2½" x 10' flat facia panels handsomely fin-

ish the industrial area wall treatment. East, West and South elevation double tee panels are removable and provide for future expansion. Wood nailers for flashing and metal fascia were treated and plant cast into wall panel units.

8' x 9" to 9½" x 27' vertically grooved, flat, insulated office panels are highlighted by 19' variable

depth, 1 piece shadow boxes which frame first and second floor windows. The top 6' of the office panel has a steel form finish complementing the industrial area facia.

Wells Concrete Products Company is proud to have participated in the construction of its industrial complex. May we offer our services and PCI certified plant facilities for your prestressed assignment.





WELLS, MINNESOTA 56097 PHONE AREA CODE 507-553-3139 ST. PAUL, MINN. PHONE: 455-5671

New Promise for the Northeast

By Louis R. Lundgren, AIA

President, Minnesota Society of Architects

Since the early French trappers first viewed the lakes and the forests and were impressed with the rare and awesome beauty of the Northeast it has been a mecca for people who want to share some solitude and communication with this beauty. With appropriate controls we trust this can always remain so.

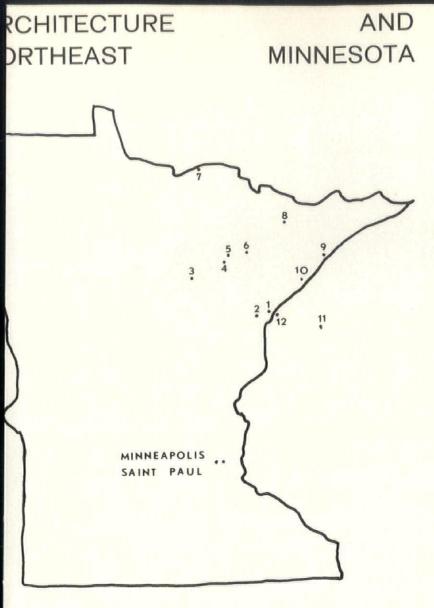
Economic development of the Northeast, however, has been a series of spurts and valleys based primarily on the economic activities of single or nearly single industries.

The economic health of the region is again becoming strong, at least with the huge investments of the taconite industry. A stringent tax policy had to be promised by the State of Minnesota in order to encourage these industries to make their gigantic capital investments. It is obvious that this taxing policy will allow additional taxes in the future.

It is particularly pleasing that one of the Northeast's great citizens, Jeno Paulucci, has commissioned experts to study this very subject. His plan will determine, from the point of view of complete fairness to all parties, what can be raised additionally in terms of taxes paid by the taconite industry and how these monies can best be invested to further the economic development of the area.

A great plan is needed in order to stir the imagination of the entire citizenry, one which will encourage constancy in development. A review of this issue of the Northwest Architect will convince everyone that there is no shortage of able design talent in the area to aid in this development.

On behalf of all members of the Minnesota Society of Architects I congratulate the Northeast Chapter on its great undertaking and wish it every success in accomplishing the goals set forth.



The history of Duluth and northeastern Minnesota dates back to the hardy French-Canadian voyageurs who came over Lake Superior in their large birch bark canoes and finally developed a route up the St. Louis and East Savanna rivers, across the six-mile Savanna Portage and down the west Savanna River to the Mississippi. With the fur trading came a type of timber structure for forts and trading posts, featuring simple log structures. Following the fur trading came the logging and lumbering industry, which led to the development of sawmills and papermills.

With the discovery of iron ore came the development of mining on the famous Iron Range of Minnesota. This created the need for underground mine structures and other unique steel structures.

Today, with the depletion of high grade iron ore in this area, has come the taconite industry. Legislation has been passed which guarantees equalization of taxes on taconite ore. With this development the basic economy of the area is assured for the next 100 years.

Duluth—with its tremendous harbor facilities on Lake Superior, including the iron ore docks, grain elevators, coal docks and now the Port Authority of Duluth, which links the whole area to the rest of the world via the St. Lawrence Seaway—is the hub through which industries import materials and export their products.

-Hibbing
-Chisholm
-Virginia
-International Falls
-Ely
-Silver Bay
-North Shore of Lake Superior
-Ashland, Wisconsin
-Superior, Wisconsin

-Duluth

-Cloquet

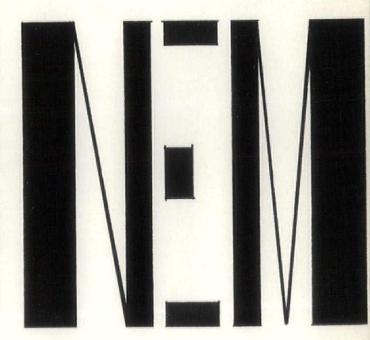
-Grand Rapids

Your architectural tour begins in the Duluth harbor. We will visit the City of Duluth and cities in northeastern Minnesota and examine buildings rating an architect's approval for their structure, function and aesthetic delight. At the end of our journey we will find ourselves back in the Duluth harbor whence we

On the pages that follow you will find numbers by the illustrations which correspond to the numbers assigned towns on the map as shown in the key here. This will enable you to relate the structure to the site.

As we approach the harbor the aerial bridge lifts, signifying the beginning of our tour.

This special feature on Northeastern Minnesota was prepared and designed by the publications committee of the Northeast Chapter, American Institute of Architects, Thomas J. Shefchik, chairman. The committee members were Raymond J. Blesener, Gerald W. Johnson, Michael Stehlin, Duane M. Stolpe, G. Kendal Sweetnam and Marinus Westerham.



er photo by Michael Stehlin.

ture article editorial comments Frank Young, Curator, St. Louis nty Historical Society.



1. Aerial Bridge (1905) 1. Aerial Bridge (1905)
Strategically located a entry to the harbor, structure is Duluth's distinctive landmark. original bridge had a pended car carrying pagers across the ship but in 1928 was replaced. but in 1928 was replace a lift section. The beconnects Duluth proper Minnesota Point.

2. Duluth-Superior

Pridro (1961)

Bridge (1961)

The huge steel and cor span, with approache about two miles in le The interstate bridge nects Minnesota and consin across St. Louis

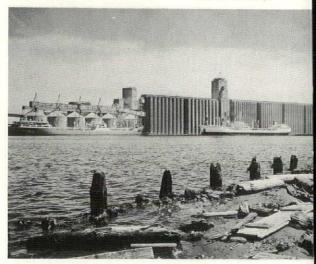
3. Duluth Ore Docks This concrete and structure is the land mination point for iron from northern Minn iron range. From here

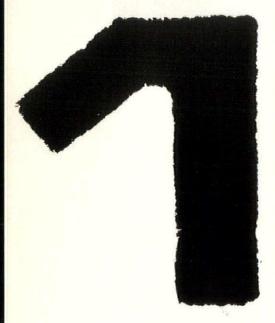
loaded into ore boats sent down the Great

to steel mills.
4. Grain Elevators, Du Superior Harbor

These concrete grain age bins are the large the world. Grain is brown to them by trucks and ported by ships throug the world via the St. rence Seaway.

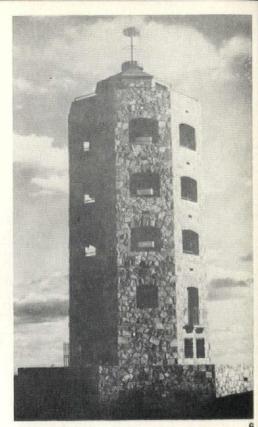




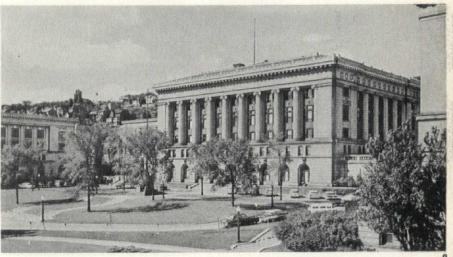


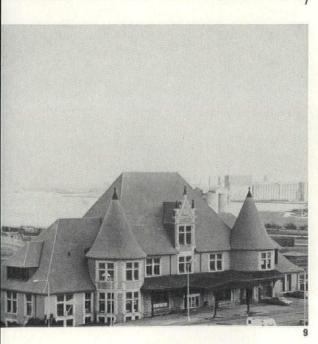












5. Duluth Arena Auditorium (1966) Northern Minnesota's largest cultural and sport center. A collaborative effort of the architects of Duluth.

6. Enger Tower—A. R. Melander, Architect, Duluth

Built in 1938 as a memorial to the late B. J. Enger. Designed in the Nordic style as characterized by the native stone work, it rises 531 feet above Lake Superior.

feet above Lake Superior.
7. Soo Line Depot (1911)—C. E. Bell,
Tyre and Coburn, Architects, Boston,

This depot has become a Minnesota landmark and exhibits the architectural confusion of the period by featuring Classical, Roman and Georgian eclecticism.

8. Civic Center Complex (1937)—C.

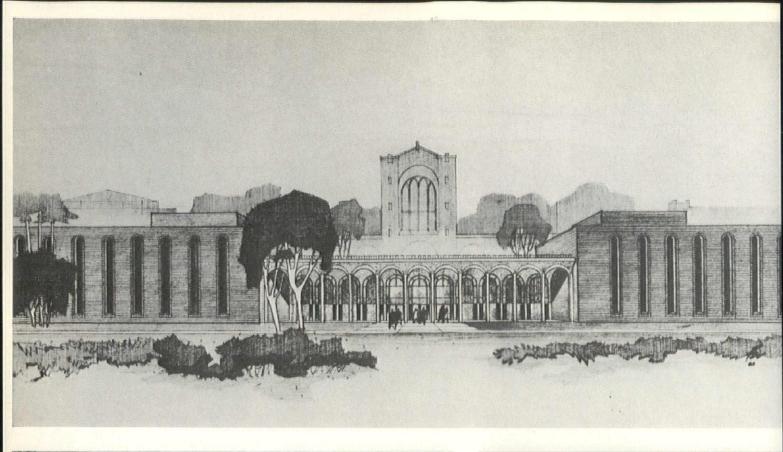
H. Smith, Architect, from a plan drafted by Danial Burnhame (Chicago, 1907)

go, 1907)
This complex plan consists of a Court House, City Hall and Federal Building centered around a civic plaza. The Court House built of granite is a classically massive structure. The Federal Building and City Hall are modifications of the Court House yet are architecturally in proportion and provide a general

unity of the group.

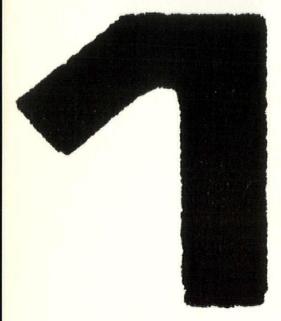
9. Union Depot (1892)—Peabody and

Sterns, Boston, Mass.
Imitating the H. H. Richardson style, the depot takes on the characteristics of a turreted chateau. The structure features walls of Hinckley sandstone and Chaska brick, with Bedford limestone and Ortonville granite for contrast details.





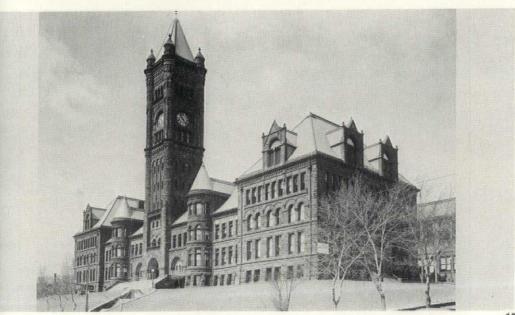












10. College of St. Scholastica, Science Building-Melander, Fugelso & Associates, Architects

Being unable to retain the Gothic architecture of the existing campus due to rising la-bor costs, a contemporary structure was erected, still maintaining a tie with existing structures.

11. College of St. Scholastica, Dormitory Commons Complex-Melander, Fugelso & Associates, Architects

A 300-bed dormitory with a cafeteria and commons for student gatherings.

12. College of St. Scholastica This women's Catholic college is built on a high bluff in English Gothic style. It resembles a medieval English castle and is built

of stone quarried on the grounds.

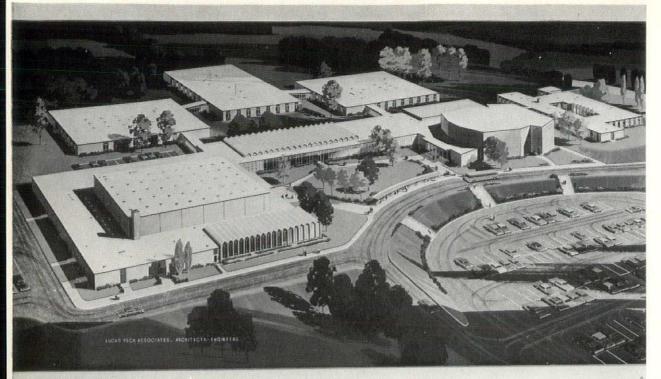
13. University of Minnesota, Duluth
A "campus under one roof" controlled by the university advisory architect, Winston A. Close. All the main classroom buildings are accessible to students without going out-

14 and 15. Duluth Area Institute of Technology-Thomas J. Shefchik and Associates, Architects

This building, located on a 100-acre site, contains 120,000 square feet of area. It is a two-story "square" with brick paver-floor, battered brick walls to surrounding balconies and skylights overhead.

16. Duluth Central High School (1892)-Palmer and Hunt, Architects One of the nation's most outstanding ex-

amples of Romanesque revival architecture, it features a T-shape structure of Minnesota brownstone with pyramidal roofs, corner win-dow projections. The horizontal composition achieves unity and vertical thrust through the strong centrally located square bell tower.



CATHEORAL HIGH SCHOOL

17. Cathedral High Sch Arthur C. Lucas and A ciates, Architects

The site for this proje 42 acres at the top of Duluth Skyline, with a of Lake Superior and harbor. This co-educat school is constructed 1,500 students with sepapoys' and girls' class wings but joint use of 6 main facilities.

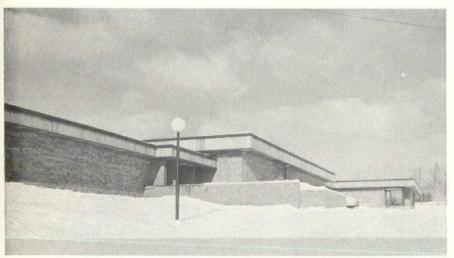
18 and 19. Additiona Chester Park School—T as J. Shefchik and As ates, Architects

With individualized instion being a prime decriteria, the 12 new crooms were arrange three pods, all which open to the instructiona search center. The resecenter is an open s which is flooded with ural light through skylip

20. Natural Water Qu Research Laboratory lander, Fugelso & As ates, Architects

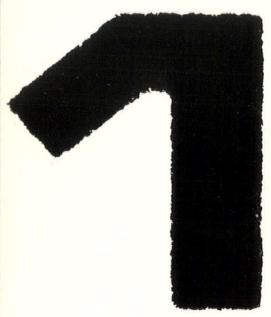
Standing on the short Lake Superior is one of government controlled wild laboratories and the fresh water laboratory the U.S.

17





18

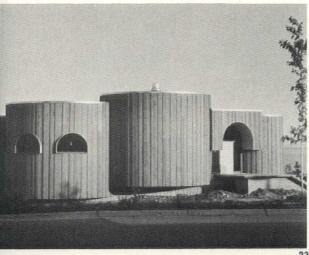


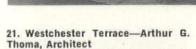












A 55-unit condominium complex in a total of 11 buildings now under construction.

22. Whiteside Residence

22. Whiteside Residence
Sensitivity, detailing and the essence of craftsmanship are seen in this Duluth residence. An architectural achievement of yesteryear.

23. "The Bellows" — Morgenstern, Stanius and Thorsen, Architects
Recently completed, this restaurant stands on the shores of Lake Superior. perior.

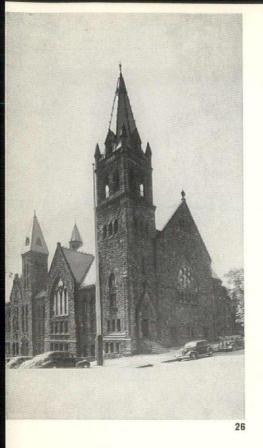
perior.

24. London House—Morgenstern,
Stanius and Thorsen, Architects
This contemporary restaurant overlooking Lake Superior seats 300
diners, with bar facilities and meeting rooms on the main floor.

25. Storms Residence
Rising from a Duluth hillside, overlooking the Duluth-Superior harbor,
is one of the finest examples of or-

is one of the finest examples of organic architecture in northern Minnesota. Major materials used were wood and stone native to Duluth.







26 and 27. First Methodist Church Gold forms in a well balanced architectural

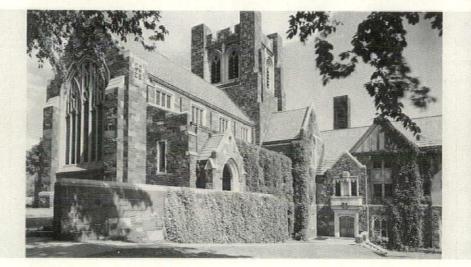
Gold forms in a well balanced architectural composition and sensitivity of detailing in an architectural space are seen in this Gothic structure.

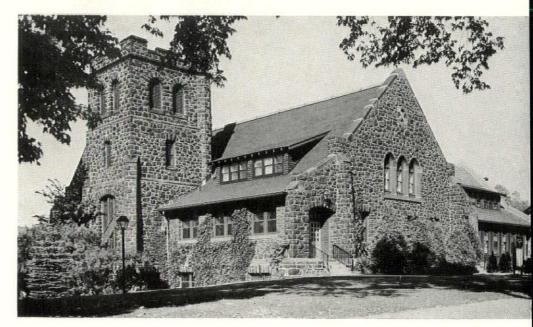
28. St. Paul Episcopal Church—Cram, Goodhue and Ferguson, Architects

Originally built in 1913 and designed in the manner of an English county parish church, it was the first church in Duluth. The church was constructed with a slat covered timber roof and side entrance. The walls are of the native stone found in the hills near the site.

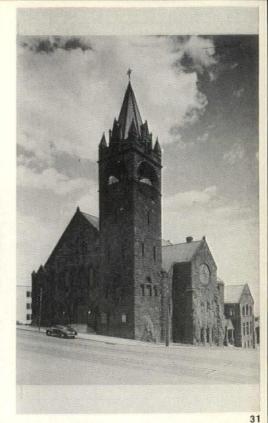
29. Glen Avon Church—Original building—architect unknown; Remodeled in 1948, C. H. Smith, Architect

This church, built in 1907, acquired its name from a Scottish pioneer who was reminded of his home in Scotland. The stone used in the construction was brought directly from the Glen Avon district of Duluth.

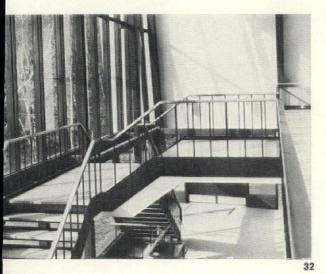














30. First United Methodist Church— Pietro Belluschi and Melander, Fugelso & Associates, Architects

This fortress-like structure of granite with a copper roof was built on solid rock overlooking Duluth and its harbor facilities. The verticality of the nave gives great contrast to its surrounding horizontal elements. 31. First Presbyterian Church (1873) —Traphagen and Fitzpatrick, Architects

One of the last remaining examples of Romanesque styling, this church features a unified composition of heaviness and vertical thrust. The tower stands 175 feet above the street.

32 and 33. Concordia Lutheran Church—Morgenstern, Stanius and Thorsen, Architects

The design concept was to create a church structure conducive to good acoustics, hence the wedge shaped auditorium. Both the roof and side wall roofs were curved together with wall below to soften the shape.



3.



Chateau DuLac Apartments — Damberg

and Peck, Architects

This secluded six-story bearing wall, 60-unit, luxury apartment building is located on the shore of Lake Superior. All apartments are accessible by elevator to the underground heated garage. Elaborate security systems in-

sure privacy.

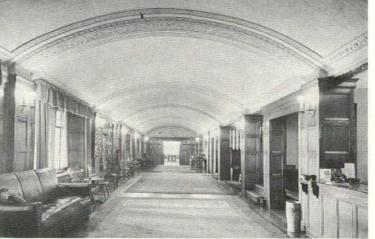
35. Gallery 5—John Ivey Thomas, Architect
Hotel renovated into an art gallery for local
art exhibitions. The character of the interior spaces has been retained and incorporated

into a pleasing gallery atmosphere.

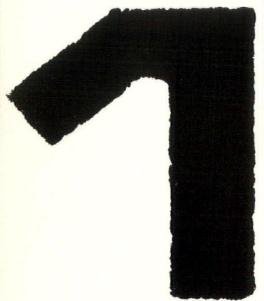
36 & 37. Kitchi Gammi Club—Cram and Goodhue, New York, Architects

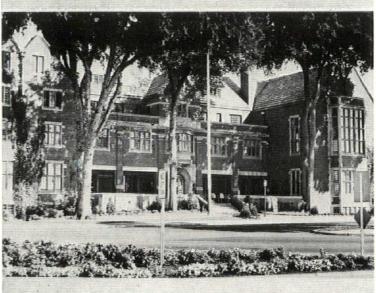
A Gothic designed structure, built in 1913, of

brick and wood imported from England and Australia. The exterior takes on the character of an English manor house, with its cen-tral interior feature being that of a fireplace in every major space.











St. Lukes Hospital (1969 ition)—Thomas J. Shef-& Associates, Architects new wing has 190 air new wing has 190 air ditioned rooms with ac-imodations for 268 pa-its. Each floor has a arium with a view of Lake perior.

Starkey Residence—Mar-Bruer, Architect sed on stilts to give a matic view of Lake Su-ior, this residence has a nounced nautical flavor gesting gangways con-ting the structure to the

and 41. Bowman Resi-ice—John Ivey Thomas, hitect minant materials are gh sawn timbers from year-old ore dock col-ns, local field stone and idmade quarry tile.

Board of Trade Build-s (1893)—Traphagen and zpatrick, Architects is building is Roman-ue in style, having sim-lines with great details. leatures alternating lines sandstone, and pressed sandstone and pressed ck with crisp window nings.







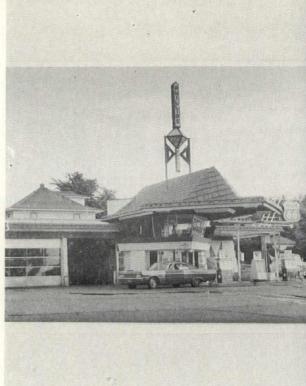




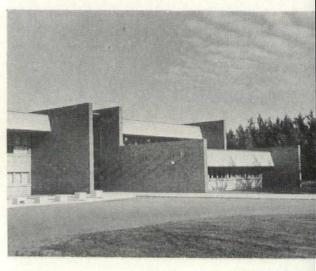


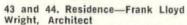
40









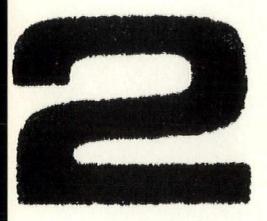


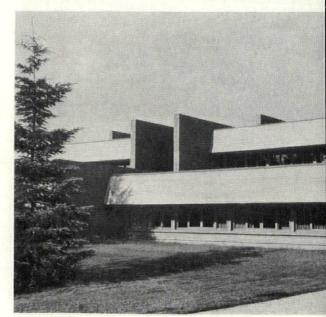
The only examples of Wright's residential work in northern Minnesota. Details synonymous with the name Wright can be seen in this residence (high windows, large overhangs, intimate exterior spaces for privacy).

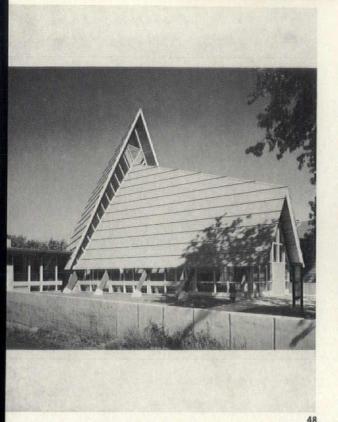
45. Service Station — Frank Lloyd Wright, Architect
The owner, a personal friend of Wright, called on Wright for the design of his service station. Wright complied with his wishes and it turned out to be Wright's first and only such structure. dential work in northern Minnesota.

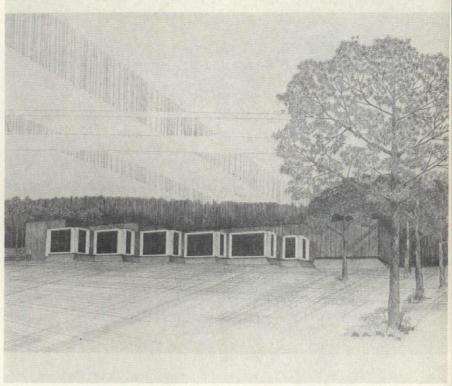
only such structure. 46 and 47. Cloquet High School— Hammel, Green and Abrahamson, Architects

A contemporary school design which features bold forms, sensitivity of details and intimately scaled spaces for student activities.

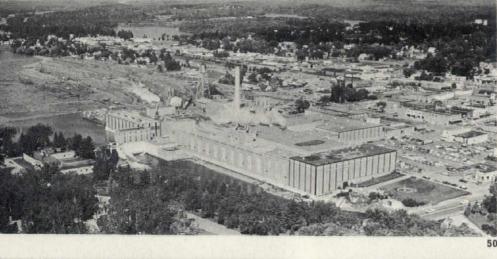
















48. Bethel Lutheran Church, Bovey, Minn .-Jyring and Whiteman, Architects Built of wood, this structure suggests sim-

plicity and northland charm.

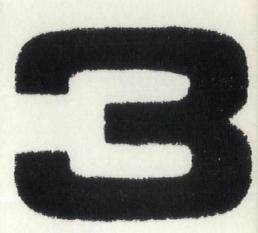
49. Dairyland Co-op, Inc., Grand Rapids, Minn.
—Thomas J. Shefchik & Associates, Archi-

tects
This office building and garage facility is situated on a hilly site overlooking the Mississippi River Valley. The sawtooth design with earth berm of the office wing offer optimum expansion to this view.

50. Blandin Paper Co., Grand Rapids, Minn. The Blandin Paper Company mill was originally built in 1901 and produced 25 tons of newsprint each 24 hours. In 1950 extensive expansion started with a program and design established by Ellerbe and Company of St. Paul. The present plant produces more than 500 tons of printing paper each 24 hours.

51 and 52. Dr. J. A. Bolz Residence on Jacques Lake, Grand Rapids, Minn.—Jyring and Whiteman, Architects
Features native stone for lower walls and fire-

Features native stone for lower walls and fireplace and naturally finished smooth woods above.

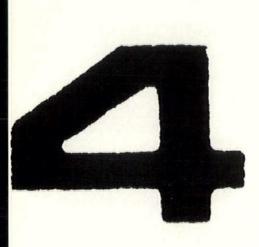










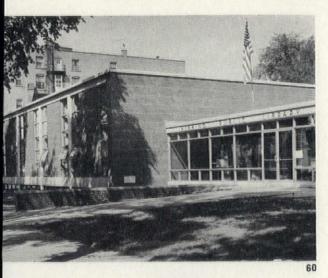












BING

system.

original town of Hibbing an in 1893 as a lumber

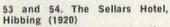
mining community. In

O the entire town was yed one mile to the th. Hibbing exists to-

as a prospering center

of Range communities. "City Without Smoke"

sts an underground heat-



Being moved to a new location one mile south, it collapsed enroute. About 185 dwellings, 12 frame business buildings and eight brick business blocks were moved.

55. Hibbing (1920) Construction of the new Main Street. Notice the simple yet strong architectural forms.

56. Hibbing-The Androy Hotel (1920)

Heavy symmetrical composition with delicate details for contrast.

with delicate details for contrast.

57. Hibbing High School (1920)—

W. T. Bray, Architect

Costing \$3,927,325, this Italian

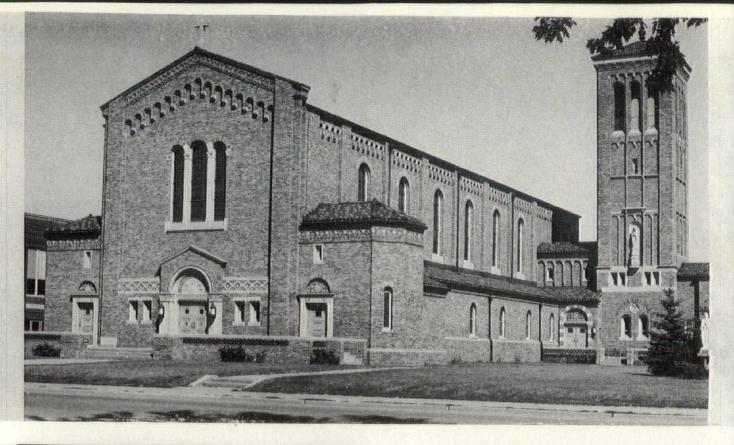
Gothic structure is a unified composition of red brick and Bedford stone. The most dominant feature of the school is the auditorium, which is patterned auditorium, which is patterned after the famous capital theater in New York City. Imported cut glass chandeliers flood the space with light.



58 & 59. St. Louis County Courthouse, Hibbing (1960)—Jyring and Whiteman, Architects
Located at the east end of Hibbing, public access is oriented toward the town to the west; police facilities and employee parking are to the east. Each element in the building has its own entrance with a scale has its own entrance, with a scale that relates to the function. The interior features hand-split stone

and terrazzo floors. 60 and 61. Hibbing Public Library— Jyring and Whiteman, Architects

Strong separation functions (adult library, children's library and check-out research center) and grand two-story reading room (adult library) are the predominant architectural characteristics of this community building.



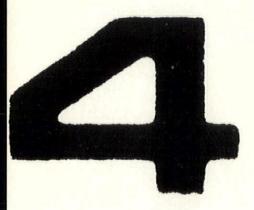


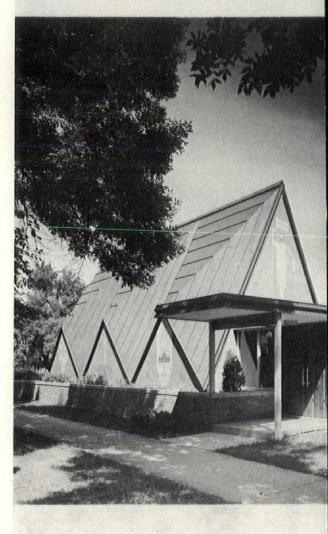
63
62. Blessed Sacrament Church—
O'Meara and Hill, Architects

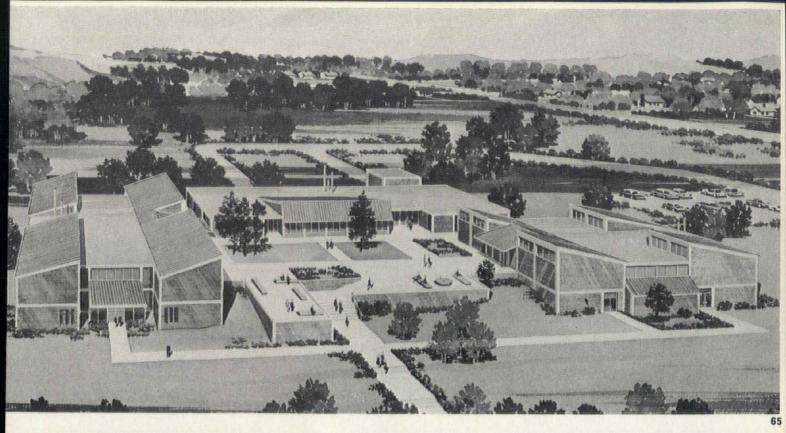
Strong form, yet with a simple charm, characterizes this Byzantine orientated structure of brick with clay tile roofs.

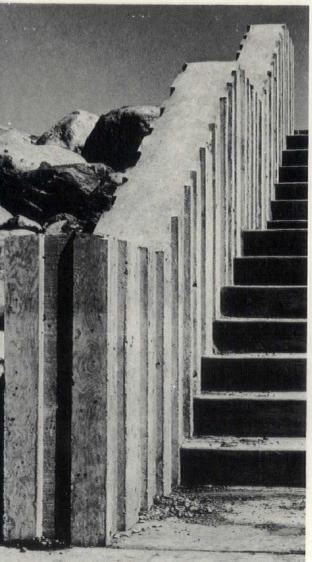
clay tile roofs. 63 and 64. Our Saviors Lutheran Church—Robert Y. Sandberg, Architect

Ceramic wall panels depict the life of Christ. The chapel section was preconstructed in the shop and dismantled for job assembly.











65. Hibbing Junior College—Morgenstern, Stanius and Thorsen and Robert Y. Sandberg, Architects
A court-oriented scheme near the St. Louis County fairgrounds. The site allows for parking and future expansion.
66. Hibbing Junior College Activities Building—Robert Y. Sandberg, Architect

itect

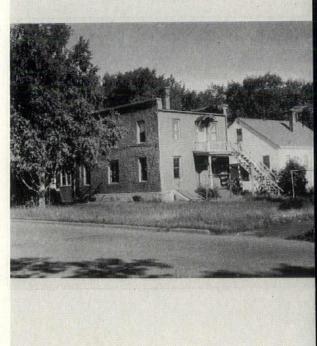
As a contrast to the dominating shed roofs of the college proper, the Activities Building takes on a form conducive to the function it serves yet still ties in quite well with the

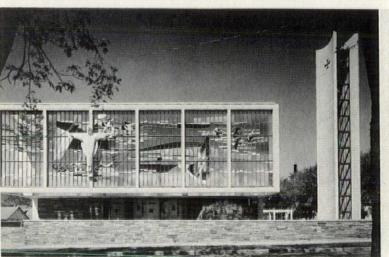
rest of the campus.

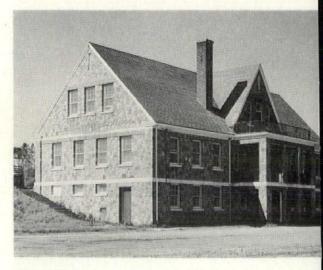
67. Hibbing Junior College, Stair and Retaining Wall Detail—Robert

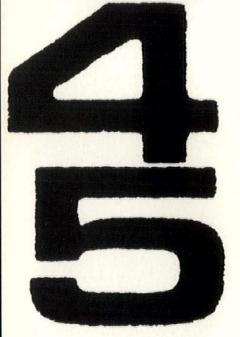
Y. Sandberg, Architect
Detail form board concrete achieves great contrast to the face brick and creates a tie-in with the exposed concrete areas of the College struc-









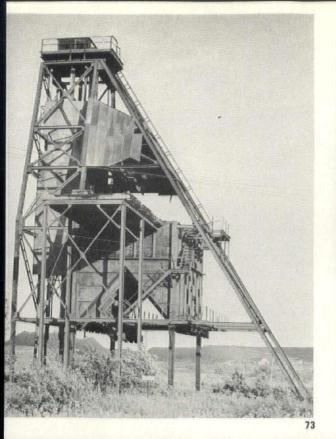




68 and 69. Architect Robert Y. Sandberg's Office and Reside Building features an inner court. House-office separation is plemented by a corner lot, allowing for separate entrances. fore remodeling it was a 50-year-old two-story log house. 70 and 71. St. Joseph's Church, Chisholm, Minn.—Jyring Whiteman, Architects
Unique altar lighting by sunlight is through a colored glass do The color pattern changes constantly as the sun moves ab The church has a seating capacity of 900.
72. Chisholm Field House
Native stone achieves strong architectural character in a sin

Native stone achieves strong architectural character in a sin building form.

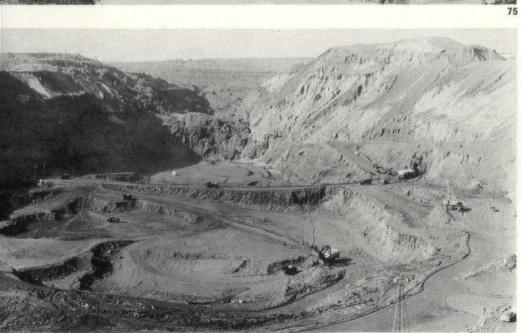
70

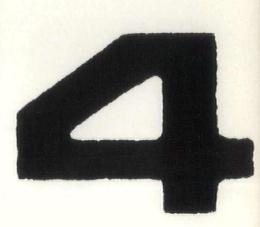






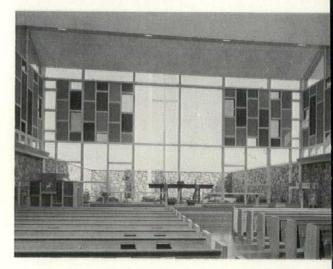
73. Mining in Northern Minnesota
Abandoned loader recalls days of early underground mining.
74. Underground Mine Shaft
Heavy timber construction is used to retain the earth.
75. Open Pit Mines
Largest open pit mines in the world have been the main source of the Iron Range wealth.
76. Taconite Plant
Due to depletion of ore deposits by open pit mining, the taconite industry evolved. In this plant the ore is crushed, separated magnetically from the taconite rock, pelletized and shipped to eastern steel mills—a far cry from the pick and shovel open pit mining of yester-year.

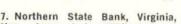








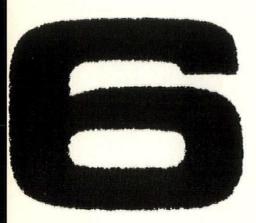




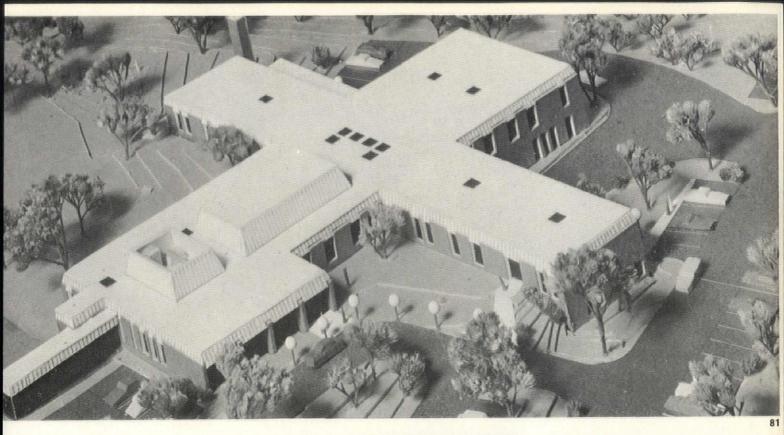
77. Northern State Bank, Virginia, Minn.—Aguar, Jyring, Whiteman and Moser, Architects
An example of the possibility of retaining the character of an old building and converting it to modern use. This bank was formerly a railroad denot

road depot.
78, 79, 80. Gethsemane Lutheran Church, Virginia, Minn.—Jyring and Whiteman, Architects

Features a columnless nave of glass and native stone, with the focal point being a garden court directly behind the altar.











81. International Falls Hospital — Melander, Fugelso & Associates, Architects

A 63-bed hospital located on the fast sloping bank of the Rainy River. The T-shaped plan features brick walls with canted stone fascia.

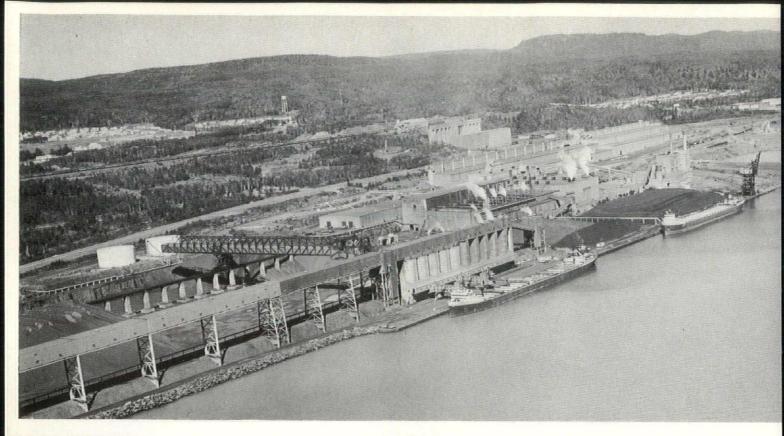
82. Tourist Information Center, Ely, Minn.— Jyring and Whiteman, Architects

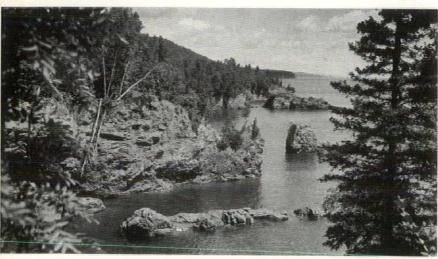
Jyring and Whiteman, Architects
Situated on this edge of the wilderness of the boundary waters canoe country, this huge wood beam and stone buttressed structure is the first nature-oriented contact man makes as he starts his journey back into nature.

83. Vermillion State Junior College—Arthur C. Lucas and Associates, Architects
Project conception is a campus plan of three structures: one to house the activities build-

structures: one to house the activities build-ings, another for administration and library and the third for all classroom facilities. The site is a 40-acre rocky outcrop with an exceptionally good view of Shagawa Lake.





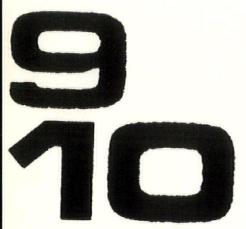


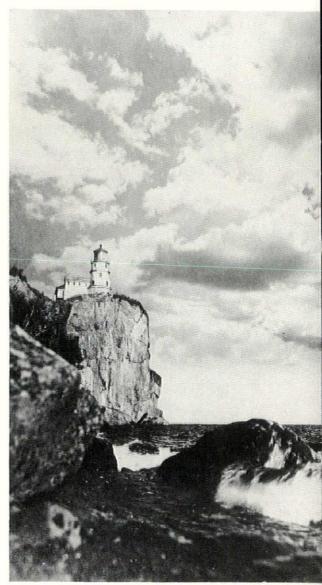
84. Taconite Plant with Harbor Fa-

cilities, Silver Bay, Minn.
The world's first large scale commercial taconite processing plant. 85. Native State

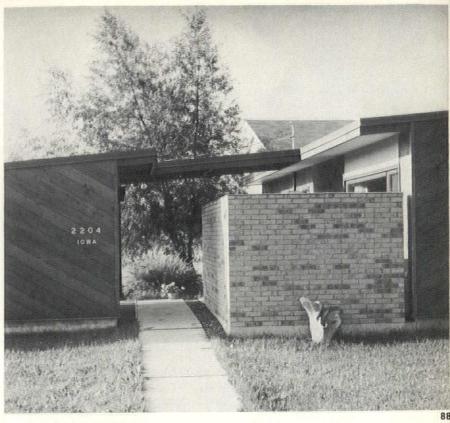
With its towering rock cliff, free flowing streams and virgin timberland the north shore of Lake Superior is one of the few areas left in our country where the "Mother Nature" still exists. 86. Split Rock Lighthouse Rising from the rugged shores of

Lake Superior, this lighthouse stands in majesty. Cited as the highest lighthouse in the world, its beacon guided ships with a beam that could be seen for a distance of 22 miles. Now outdated, it is in the process of being made into a Minnesota landmark and museum.















87 and 88. Marvin Dobberman Residence-

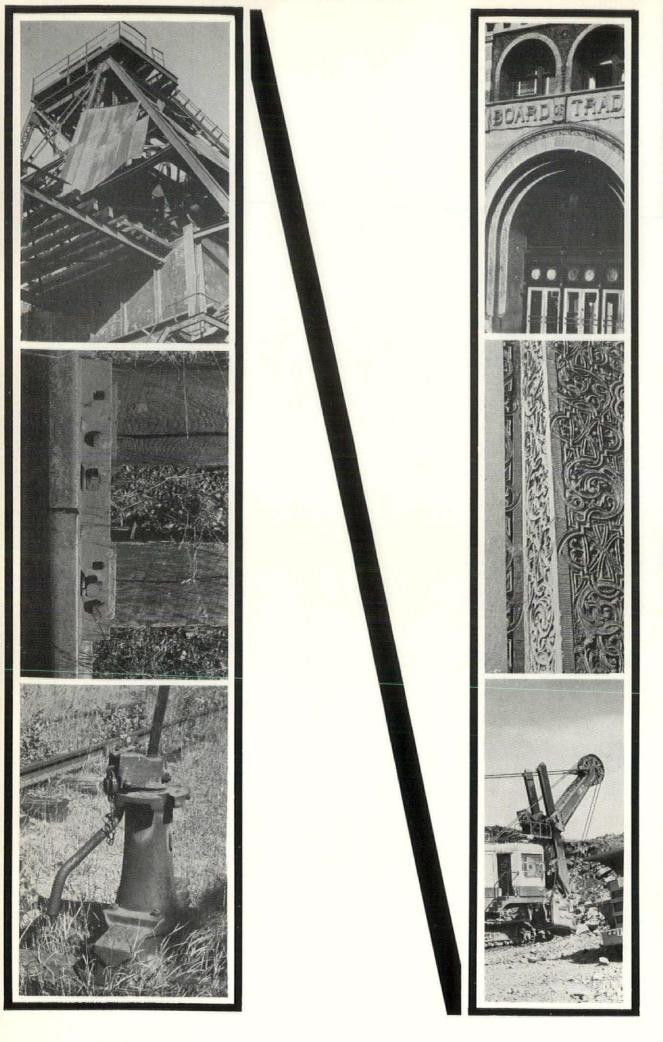
Dobberman and Helske, Architects This 40'x40' home on a small lot in town is designed for privacy, with garden court and skydome lighting.

89. Zion Lutheran Church—Thomas J. Shefchik & Associates, Architects

The church is basically a masonry building featuring the nave as its focal point. The nave ceiling is of laminated beams and wood deck with a raised area over the altar. A small prayer chapel reflects the character of the nave the nave.

90. Aerial Bridge, Duluth Harbor

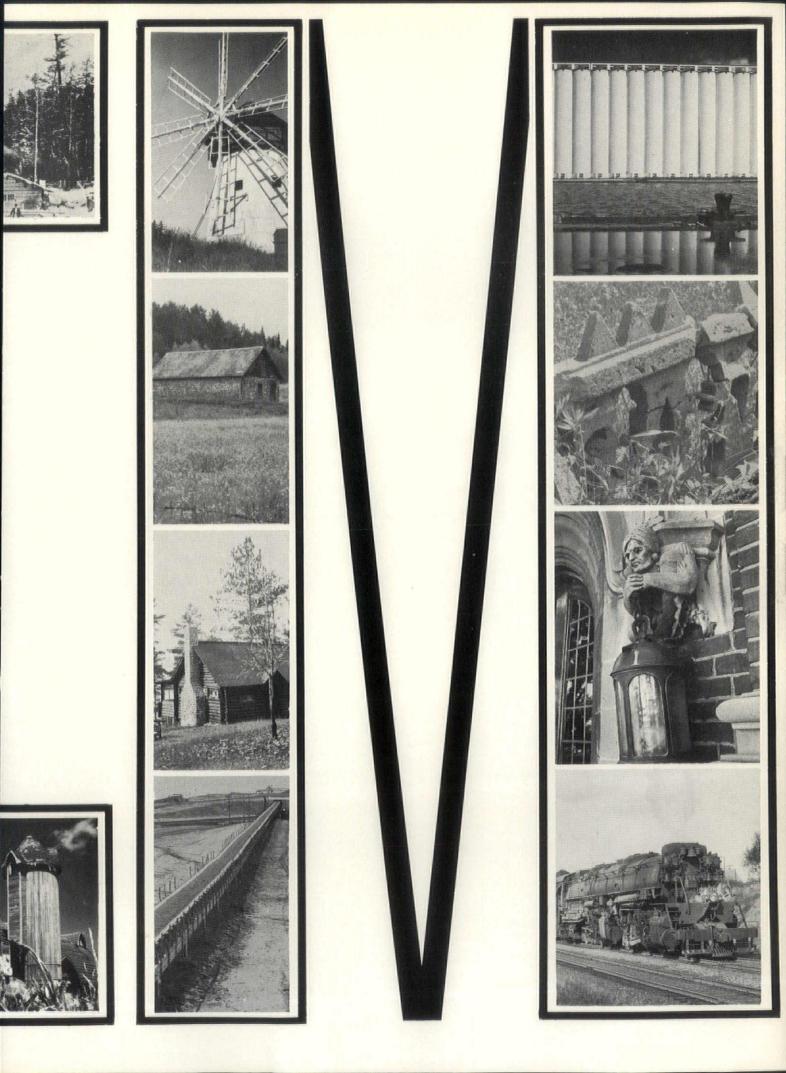
As we leave the harbor, once again the Aerial bridge begins its descent, signifying the end of our Architectural Tour. We hope this tour has been an experience as well as an education for anyone who visits or lives in North-eastern Minnesota.













An employee's financial problems can affect his work and your profits.

An employee's unexpected bills can reduce his efficiency — bring on absenteeism and accidents.

That's why the Payroll Savings Plan for U.S. Savings Bonds is just as good an investment for the company as it is for the employee. Financially-secure employees are more stable, predictable and dependable.

They also appreciate their boss' contribution in making this easiest-of-all savings plan available to them — a plan that offers two dependable securities:

Series E Savings Bonds and their companion Freedom Shares.

Information on how to install and operate the Payroll Savings Plan is available from: U.S. Savings Bonds Division, The Department of the Treasury, Washington, D.C. 20226. Or, if your company already offers Payroll Savings, why not plan a re-canvass of your employees soon? It's happening in thousands of companies around the country as part of the Share in America Savings Bonds campaign.

Take Stock in America PROMOTE THE PAYROLL SAVINGS PLAN for U.S. Savings Bonds/Freedom Shares



The U.S. Government does not pay for this advertisement. It is presented as a public service in cooperation with The Department of The Treasury and The Advertising Council.



BID:

SEPARATE MECHANICAL CONTRACTS ASKED:

EFFICIENCY, ECONOMY, EXPERTISE

When you're in the market for bids, be sure to separate the mechanical contracts from general construction. **SEPARATE MECHANICAL CONTRACTS** assure positive performance, best return on investment.

SEPARATE MECHANICAL CONTRACTS permit more control, require less supervision, result in higher standards of quality. That's efficiency.

SEPARATE MECHANICAL CONTRACTS reduce costs of installation, operation, and maintenance. That's economy.

And **SEPARATE MECHANICAL CONTRACTS** engage the experience, the technical knowledge, and full physical resources of successful and reputable mechanical contracting firms. That's expertise.

Take mechanical installations out of the speculative class by letting separate mechanical system contracts.

It's an investment procedure certain to return rich dividends to you and your clients.









PIPING INDUSTRY DEVELOPMENT COUNCIL

OF MINNEAPOLIS AND ST. PAUL

BOOK REVIEWS

BOOKLET CALLS FOR JOINT ACTION TO IMPROVE DESIGN OF CITIES

The business community has been urged to join with public leaders in a concerted effort to improve the design and livability of American cities in a new booklet released by the AIA and the Chamber of Commerce of the United States. The consequences of failure to do so, the publication concludes, can be dire.

Written for the AIA by John Hirten, then executive director of the San Francisco Planning and Urban Renewal Association, the booklet stresses that steady deterioration of our cities is causing enormous business losses and leads directly to higher crime rates, soaring welfare rolls and other urban

problems.

Entitled "Form, Design and More Attractive Environment," it points out that to the businessman this urban decay can mean "the loss of billions of dollars invested over the years in real estate, transportation systems and facilities of all kinds." Widespread apathy is pinpointed as one of the chief obstacles to improving city design and failure to take corrective action immediately, it warns, can only result in the continued decline of the quality of city living. One suggestion made is that business and public leaders work together to achieve better urban design, with business asserting dual influence since it builds major sections of the community and plays a crucial role in civic affairs.

In addition the booklet urges that news media play a more prominent role in building awareness for design questions by offering enlightened criticism of a city's architecture. The publication singles out modern building codes and a set of minimum design development standards as constructive action a community might take toward improving design. It also singles out areas where effective action has been taken, such as Philadelphia, Detroit, San Francisco and Reston, Va.

Copies are available from the Chamber's News Dept., 1615 H St., NW, Washington, D. C. 20006. Cost: 1-9 copies, \$2 each, 10-99 copies, \$1.60 each, and 100 or more, \$1.40 each.

AIA PUBLISHES "METHODS OF COMPENSATION . . ." BOOK

"Methods of Compensation for Architectural Services," a major addition to the AIA series of business oriented, educational publications, has just been published by the Institute. Prepared by the Task Force on Compensation Methods, with the assistance of Case and Company, the book is designed to be used as a sound and effective basis for determining the advantages and disadvantages of the various methods in varying applications. Accordingly it opens with a discussion of the philosophical foundation of the structure and the criteria for selecting an ideal pricing method.

In addition to describing the traditional methods of compensation, the book discusses the composite, square-foot, incentive, royalty, client determination of value and modified percentage of construction cost methods. In conclusion, it urges the architect to carefully match the method to the situation.

UN-CONVENTIONAL CALENDAR

The Minnesota Orchestra

Oct. 31—Mozart's "The Magic Flute," concert version.

Nov. 14—John Ogdon, pianist.

Nov. 21—Isaac Stern, violinist; Thomas Stacy, english horn

St. Paul Chamber Orchestra

Nov. 9-Ivan Moravec, pianist.

Nov. 23—Ma Si Hon, violinist; Tung Kwong Kwong, pianist.

University of Minnesota Northrop Auditorium

Nov. 2-University Symphony Orchestra.

Nov. 6—Richard Siegel, harpsichordist.

Nov. 9, 16—University Marching Band.

Nov. 10—Constance Wilson, voice recital, Scott Hall.

Nov. 15-Festival Chorus.

Minnesota Theatre Company

Tyrone Guthrie Theater

"Julius Caesar"—Dec. 6, 11, 16 and 19.

"The Beauty Part"—8 p.m.—Nov. 7, 15, 19, 28, Dec. 4, 9 and 18.

"The Homecoming"—8 p.m.—Oct. 25, 29, Nov. 6, 8 and 13.

"Mourning Becomes Electra"—8 p.m.—Oct. 21 and 30.

"Uncle Vanya"—8 p.m.—Nov. 1, 3, 5, 11, 12, 14, 18, 20, 21, 22, 24, 25, 26, 27, 29, Dec. 2, 3, 5, 10, 12, 13, 17 and 20. 1:30 p.m.—Oct. 8, 18, 25, Nov. 8, 12 and 19.

The Children's Theater Company

(Minneapolis Institute of Arts, 11 a.m. and 2 p.m. Saturdays, 2 p.m., Sundays)

"The Legend of Sleepy Hollow"—Oct. 25, 26, Nov. 1, 2, 8, 15 and 16.

Theater of Involvement

(1209 4th St. SE., 8 p.m.)

"Rhinoceros"—Nov. 7, 8, 9, 14, 15, 16, 21, 22 and 23.

Brave New Workshop

(2605 Hennepin Ave., 8 p.m. Wednesday through Sunday, also 10 p.m. Fridays and Saturdays, midnight Saturdays and 4 p.m. Sundays)

"Sex, Hate and Violence: The American Dream" through December.

"Sweet Basil and Other Spices"—November, midweek shows only.

"The Nice Show: The Show that Don Morrison and Will Jones Won't Talk About"— December, weekends only.

Films

"Journey Into Fear"— Orson Welles — Wed.-Thurs., Nov. 5-6.

"Citizen Kane"—Orson Welles—Fri.-Sat., Nov. 7-8.
"The Magnificent Ambersons"—Orson Welles—Sun.Mon.-Tues., Nov. 9-10-11.
Campus Theater, Minneapolis.

The Minneapolis Institute of Arts

Look Back: Cubist Paintings—through Oct. 26. Toward a Social Landscape—Oct. 1-Nov. 2. Dreamer of Dreams, Seer of Visions—through Nov. 5. Architecture of Museums—Oct. 16-Nov. 16. Winslow Homer, prints and drawings—Dec. 11-Jan. 4. Rembrandt—Dec. 23-Feb. 11.

NOTICES

IMMEDIATE POSITIONS with Ralph Rapson & Associates for talented young men experienced in all phases of architectural practice. Applications by appointment only. Submit resume. 331-5855.

ÉDUCATION PLUS: What midwestern high school of 170 boys currently has alumni at Harvard, Princeton, Swarthmore, M.I.T., McGill, London and Oxford (Rhodes Scholar), welcomes Americans and produces great hockey teams?

St. John's - Ravenscourt School, Winnipeg 19, Manitoba. Headmaster: H. John P. Schaffter, M.A. (Cambridge) 214-453-3016.

CLASSIFIED ADS regarding educational and professional opportunities (with box reply numbers if desirable) can be placed in this section by contacting Northwest Architect, 2416 University Ave., St. Paul 55114,



HEBRON, NORTH DAKOTA

The Home of Permanent Building Material



BMD & RINC.

a division of Sterner Lighting, Inc., Winsted, Minnesota

LIGHTING SYSTEMS, FIXTURES, DESIGN AND FABRICATION • 929-4658 AREA CODE 612; 7020 WALKER ST.; MPLS., MINN. 55426

Some people believe a brick should be a work of art . . .

... Ochs' does

Church of the Nativity, Dubuque, Iowa





The wonderful warmth and natural beauty of a single brick—its richness of color—its silent strength and contemporary charm is truly a work of art. Ochs' system of quality control actually judges the esthetic characteristics of each brick manufactured—thus enabling the architect to build maintenance-free walls of timeless beauty.

McGinn Associates utilized this same beauty and durability in designing the Church of the Nativity in Dubuque, Iowa.

Ochs' boasts the most modern brick equipment in the area to give you quality, Modular, Standard and Norman size brick in your choice of red, buff and gray shades in a wide variety of colors and textures ... each one a work of art. So let Ochs' provide you with the finest version of man's oldest building product—BRICK.



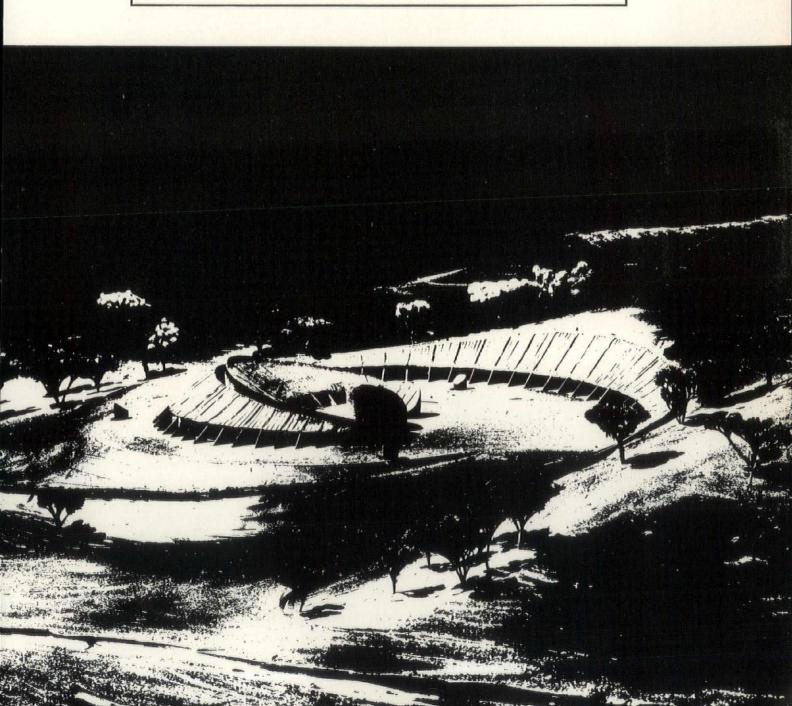
General Office and Plant: Springfield, Minn. 56087, Phone 507-723-4221, Sales Office: 4741 Chicago Ave., Minneapolis, Minn. 55407, Phone 823-7251; Dakota Brick Co., 3230 Main Ave., Fargo, N. D., Phone 701-AD-5-5519, Representatives and Jobbers in principal Upper Midwest cities.

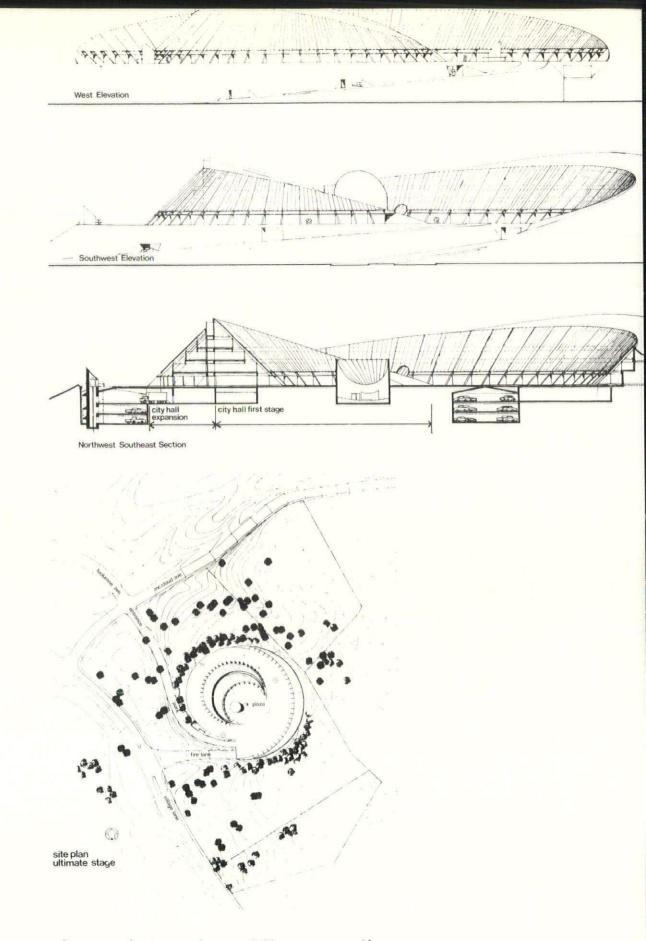
Twin Cities Competition Entries On Display in Los Angeles

The results of the national competition for the Thousand Oaks (California) Civic Center have just been announced.

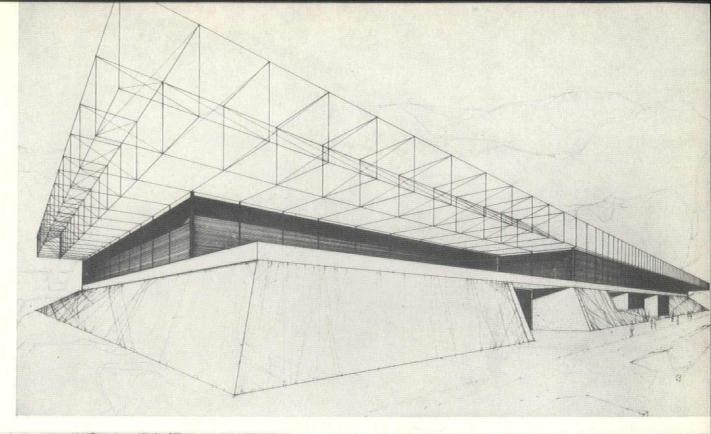
The jury, consisting of Charles W. Moore, Cesar Pelli, Jan C. Rowan, George W. Davis and Dr. Raymond Olsen, awarded the first prize to Robert Mason Houvener of San Diego, California.

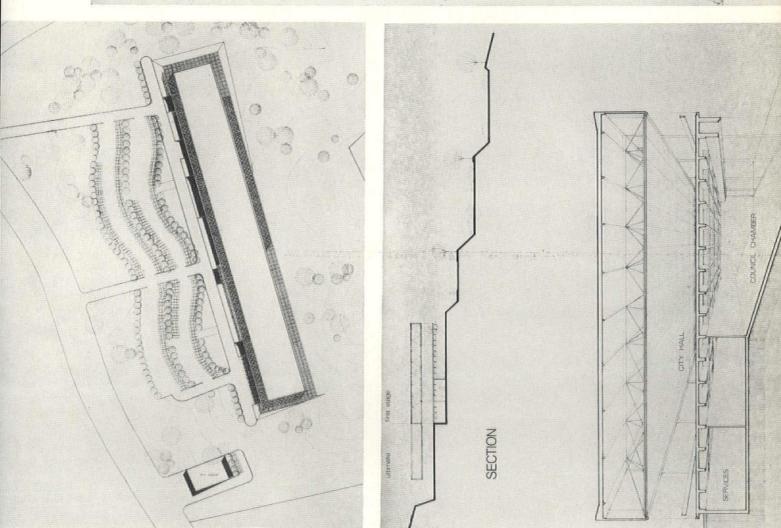
Three additional prize entries, seven honorable mentions and a number of other distinguished design submissions selected by the jury are on display in the California Museum of Science and Industry in Los Angeles. Among the latter are the following designs by Twin Cities' architects.



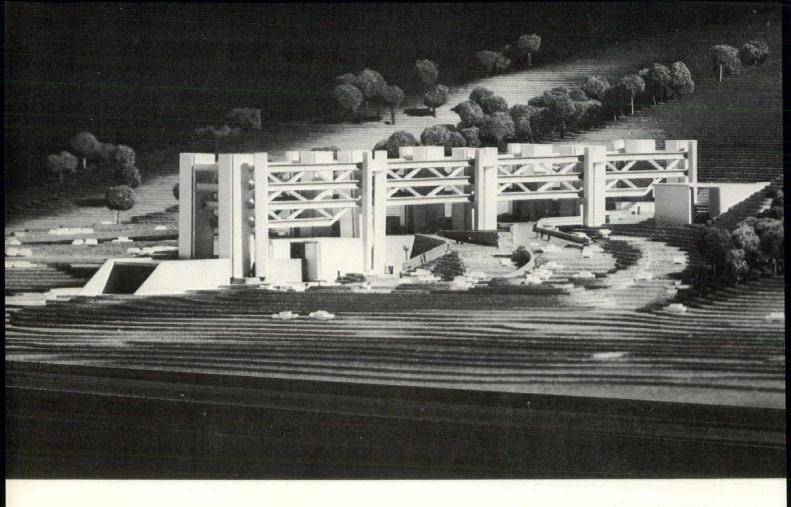


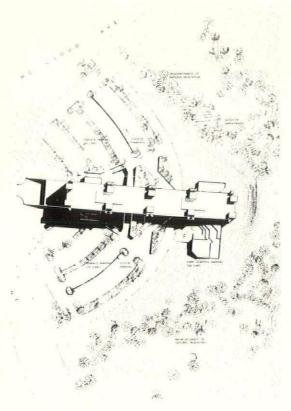
The Cerny Associates, Inc., Minneapolis

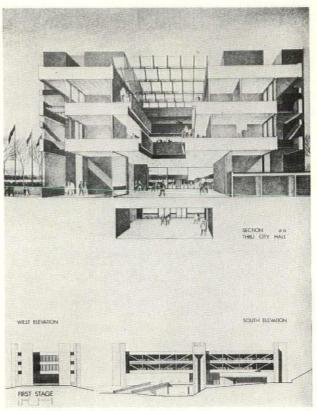




Charles E. Sullivan, Phillip Olander, L. Linn Day c/o S. C. Smiley & Associates, Minneapolis

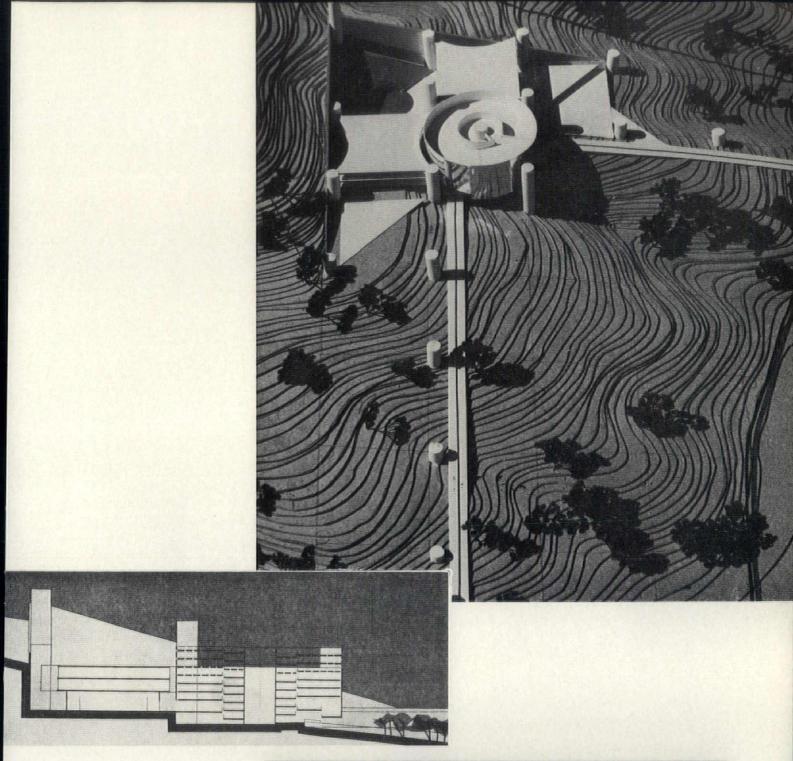


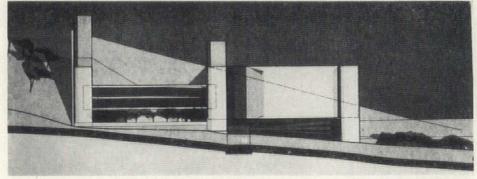




Parker-Klein Associates, Minneapolis

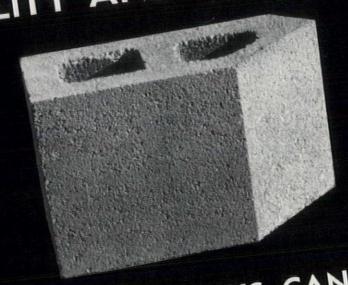
NORTHWEST ARCHITECT





Community Planning & Design Associates, Inc., Minneapolis

SPECIAL SHAPES GIVE YOU FLEXIBILITY AND REDUCE COST



SPECIAL BLOCKS CAN BE MADE FOR ANY PURPOSE

YOU NAME IT WE CAN MAKE IT

Anchor Block Company

Complete Autoclave Production No. St. Paul, Minn. 55109 Highway 36 & McKnight Road Telephone 777-8321



INLAND SUPPLY CO.

CONSTRUCTION MATERIALS

Curing Compounds
Curing Paper—Polyethylene
Expansion Joints, all types
Form Coatings
Perimeter Insulation

Thikol
Epoxy resins
Joint Fillers
Concrete inserts, reglets, etc.
Waterstops

Minnesota Distributor for Master Builders Co. Embeco, Masterplate, Omicron, Pozzolith, Colorcron

OFFICE - WAREHOUSE

1096 Raymond Ave.

St. Paul, Minn. 55108

645-4931 or 645-4816

WE ARE PROUD TO ANNOUNCE THAT SINCE 1892,

DRAKE MANTEL & TILE CO. MANTELS-MARBLE-MOSAICS.

MANUFACTURERS
WHOLESALERS
CONTRACTORS



ST. PAUL, MINN., 66 E. THIRD ST.
MINNEAPOLIS, MINN.,510 SECOND AVE. S.
FACTORY, PLATO AVE. AND C. G.W.RY.

WE'VE COME A LONG, LONG WAY



Northwestern National Bank of Saint Paul

Architect: Grover Dimond

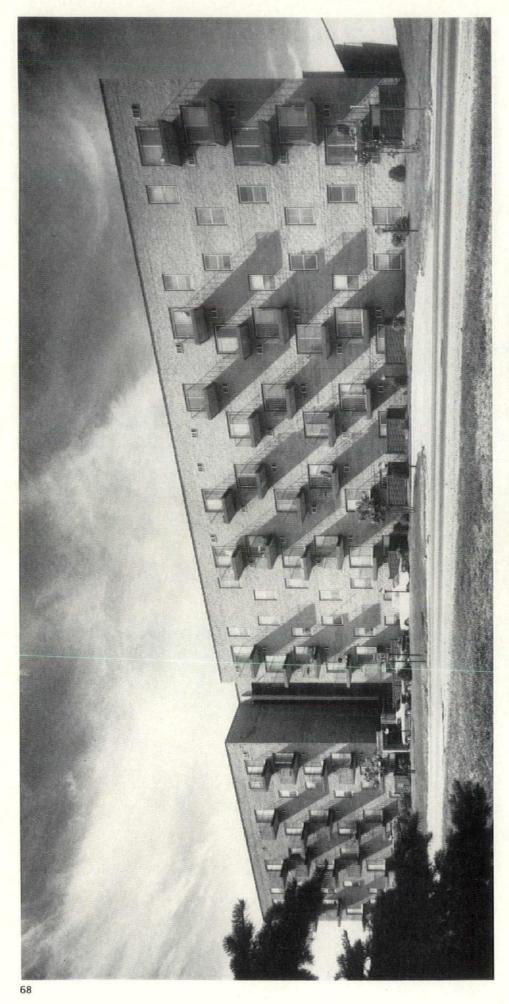
TELLER ISLANDS WITH VENEER OF IMPORTED ITALIAN BOTTICINO MARBLE

Fabricated And Installed By

DRAKE MARBLE COMPANY

60 Plato Avenue, St. Paul, Minn. 55107

222-4759



HIGH, WIDE AND HANDSOME

Not only is concrete block built for building speed, but you can give your party and shear walls a personality all their own. The Ginkel Apartments in Hopkins is a fine example of the high rise bearing wall concept—featuring the use of rugged split block. Its rich

NORTHWEST ARCHITECT

and rewarding texture enhances the sound control and thermal insulation within all rooms of this seven story apartment.

With concrete masonry construction, you combine good heat insulators with a load carrying material. Build High, Wide and Handsome with block!

Contact the nearest MCPA member for further information

Minnesota Concrete Products Association

1821 University Ave.

St. Paul, Minn. 55104

646-2893

SUBSCRIBE TO THE NORTHWEST ARCHITECT

For a friend, a client, a relative

Send a year's subscription of Northwest Architect

to

at \$3.00 per year.

Mail with remittance to Northwest Architect, 2642 University Ave., St. Paul, Minn. 55114

ARCHITECTS

Insist on CAST STONE (Artstone) to meet Federal Specifications SS-S-721C for your next project.

You can have several finishes and colors all in the same building.

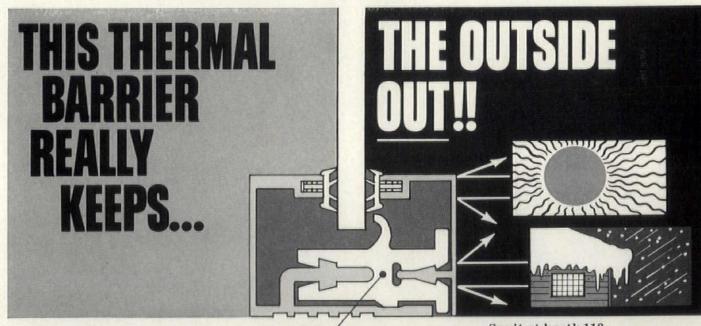
Write or call us for a Cost Estimate.

AMERICAN ARTSTONE COMPANY

New Ulm, Minnesota Phone 354-5011

20

ROBERT J. SNOW, Representative Phone 823-5035 Minneapolis



HERE'S THE SECRET*

See it at booth 118 at the St. Paul Hilton, Nov. 5, 6, 7!

CTS THERMAL BARRIER WINDOW WALL!

The secret of the CTS system is the unique molded Celon T-Block that quickly, but firmly locks the face and gutter extrusions together with absolutely no metal-to-metal contact. Virtually eliminates frost and condensation down as low as -30° F. Keeps insides cooler in hot outside conditions, too!

And, here's the clincher. With only 10 basic face and gutter units you can make over 125 perimeter and mull combinations, glazing glass and panels from \(\frac{1}{8}'' \) to an inch thick. Find out more about this revolutionary glazing system \(\text{. . it's competitively priced with conventional systems!} \)

Cronco-fite

Write or call: Cronco-Lite division of Cronstroms Manufacturing, Inc. • 4225 Hiawatha Ave. S., Minneapolis, Minnesota 54406 • Phone (612) 722-6671.

an expressionIN LATH AND PLASTER

FORMFORM

A new freedom . . . from the restrictions imposed on the architect by the rectilinear forms of conventional construction methods. Lath and plaster, as the primary architectural materials, allows unlimited versatility of form and design.



CLINT FLADLAND Executive Director

STATISTICS OF THE PARTY.

MINNESOTA LATHING & PLASTERING BUREAU

795 RAYMOND AVENUE ST. PAUL MINN 55114

NEWBER SHE THE NATIONAL BUREAU FOR TATHING A PLASTFRING INC.

(812) 649 3022

the Latest Washroom Complete Washroom



Stop By Our Booth No. 90

American Linen Supply Company

Minneapolis

St. Paul

St. Cloud

Duluth

Hibbing

Fargo

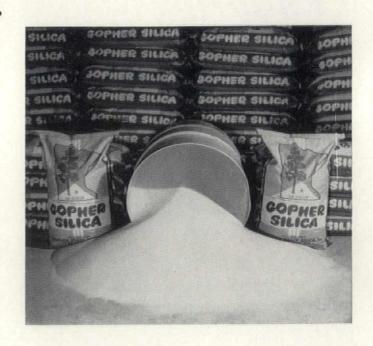
Controlled Quality

WASHED DRIED SCREENED

WHITE SILICA
PLASTER SAND

IS THE KEY TO BEST RESULTS

Available in Bags or Bulk Through Dealers



GOPHER STATE SILICA, Inc

PRODUCERS OF HIGH QUALITY SILICA PRODUCTS

MINING & PROCESSING PLANT, OTTAWA, MINN.

GENERAL OFFICE, LE SUEUR, MINN



COATINGS COMPANY

CELANESE COATINGS COMPANY

3550 Beltline Blvd. St. Louis Park, Minn. 55416 Phone-929-0337

> Special Coatings And

Paint for Any Surface

Color Service

with over 1,000 colors to choose from (or) match that color

Architect & Contractor

Coordinating to Satisfy the Client

Carl W. Fogelberg Co.

★ WALCON CORP.—Metal Building Panels & Louvers

ALLIANCE WALL-Porcelain Enamel, Laminated Veneer, Sandwich and Chalkboard Panels

PENN METAL COMPANY — Speed-Steel Structural Framing and Movable Partitions

AIROTEC INC.—Aluminum Extruded Decorative Grilles, Solar and Remodeling Screens

CALL 646-7306

1595 Selby Ave.

St. Paul 55104

Enduring Beauty

Artistic Face Brick

... every texture and color

Glazed and Unglazed Facing Tile

Paving - Floor Brick

Quarry Tile

Glass Blocks

Serving the architectural profession and construction industry of the Northwest since 1890.

TWIN CITY BRICK COMPANY

Minneapolis, Minn. • St. Paul, Minn.

Manufacturers Face Brick Building Materials Distributors

Area Notes

(Continued from Page 4)

Included in the West Acres Development Corp., a Fargo, N. D., group formed to construct a \$16 million shopping center, is M. O. Foss, Moorhead, Minnesota, architect.

. . . AND PROJECTS

MINNESOTA

An "ensculptic" (environmental sculpture in plastic) house is being built in Minnetrista under the supervision of its designer, architect Winslow Wedin, professor of architecture at Auburn University in Alabama, and with the help of some of his students. The tent-like structure is of burlap sprayed with plastic and urethane foam. Wedin, son of the wellknown artist Elof Wedin, is a 1959 graduate of the University of Minnesota.

In a rare public display of commitment to a good cause, the Minneapolis AIA Chapter issued a letter of support for the county-based General Hospital bond issue. The subsequent approval by 90% of the voters showed that there is no lack of public support for clearly worthwhile projects.

Design of the new Hennepin County Library branch in Golden Valley has been awarded to Kilstofte and Vosejpka, Wayzata. Construction of the one-story and basement building will be brick with a timber roof.

New school projects: An elementary school in Chaska, an elementary school, remodeling of the junior high school and an addition to the senior high in Shakopee, all by Armstrong, Schlichting, Torseth and Skold, Minneapolis; an addition to the Argyle school by Wells, Denbrook and Associates of Grand Forks,

Interest in the reclamation of the Mississippi River as it winds its largely hidden way through Minneapolis was stimulated by the recent two-day Urban River Conference sponsored by the Minnesota Society of Architects and the University of Minnesota. Highlights were boat tours of the river between the University Showboat landing and the Edgewater Inn at 2420 Marshall Ave. N.E., a banquet in the Minneapolis Art Institute with an astringent after-dinner speech by Ian McHarg, planner and ecologist from the University of Pennsylvania, and an all-day conference including visiting and local notables.

Miller and Melby Architects, Minneapolis, are designers for a proposed golf course at Mountain Lake,

Honors: Griswold and Rauma, Architects, and the Knutson Construction Co., both of Minneapolis, were recently awarded Navy Certificates of Commendation for their outstanding performances in the designing and the construction of the new Naval and Marine Corps Reserve Training Center there. The Cerny Associates' Brunswick Methodist Church in Crystal was awarded an honorable mention by the Liturgical Conference of Washington, D. C., one of five churches throughout the country so honored. Architects for the new Control Data research and manufacturing building at its headquarters in Bloomington are Henningson, Durham and Richardson of Omaha, Neb.

Design services for the \$40 million health sciences expansion program at the University of Minnesota will be furnished by Health Sciences Architects and Engineers, Inc., a consortium of three Twin Cities architectural and engineering firms: The Cerny Associates, Setter, Leach & Lindstrom, Inc., and Hammel, Green & Abrahamson, Inc. The office will be headed by Brooks Cavin.

Honors: Two St. Paul firms were honored at the annual session of the American Association of Medical Clinics in New York: a First Honor Award to Hammel, Green & Abrahamson, Inc., for their Minnesota Clinic of Psychiatry and Neurology in Golden Valley, and to Ellerbe Architects and Chambliss Associates of Grand Junction, Colorado, for the Glenwood Medical Associates Building in Glenwood Springs, Colo. WISCONSIN

A 157-unit apartment building for the elderly, sponsored by the Superior Catholic Charities Bureau, is to be built in Superior. Architects are **Aguar-Jyring-Whiteman-Moser**, **Duluth**. A 54-unit structure on the banks of the Wisconsin River near downtown Rhinelander is being designed by **Hirsch**, **Stevens and Sanuelson** of Hudson.

The 10-year-old County-City Building in Stevens Point is to be enlarged to provide more jail space, another courtroom and other facilities. **Ray Gauger**, St. Paul, architect of the original building, is preparing plans.

A new \$31/4 million court house is being planned for Eau Claire. Architects are Larson-Playter-Smith. Paul Hallbeck and Associates are architects for a \$95,000 fire station on the far north side of the same city.

The Chippewa Falls school building program includes an addition to Hillcrest elementary school, an industrial arts and library wing for the Senior High School, and a new 20-room elementary school. Architects are Larson-Playter-Smith.

Studies for the future use of Lincoln High in Wisconsin Rapids have been made by Warren Holmes Co., Lansing, Mich.

Thern and Associates, Oshkosh, have been hired to design an addition to the Portage high school.

A program of assistance in community renovation programs is being offered without charge by the **Sectional Environmental Design Committee** of the Wisconsin Chapter of the AIA. An early beneficiary is the village of Deerfield with its program of Norwegian store fronts.

A new Wisconsin Synod parish is building a fellowship hall as the first unit of its program in Eau Claire. **D. D. Anderson** of Milwaukee is the architect. A new Lutheran church now being built in Glenwood City is designed by **Ozolins**, **Gavic and Gavic** of Spring Valley.

Design of a new vocational and adult education building in Portage and Reedsburg is to be by the Fort Atkinson architectural firm **Kettle Moraine Associates**, **Inc.**, the new name of Waterman, Fuge and Associates.

Studies for a second high school for Oshkosh are being prepared by **Sauter Seaborne Ltd.** of Appleton. Tentative construction budget is \$6 million.

TERRAZZO

Cement Terrazzo Latex Terrazzo

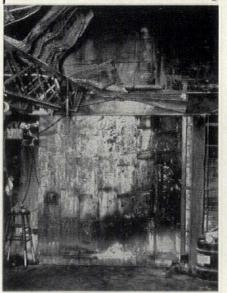
Whatever Your needs in TERRAZZO, we are here to serve you as we have been doing for over 30 years.

Venice Art Marble Co., Inc.

3158 Snelling Avenue Minneapolis, Minnesota 55406 724-5491-92

STREMEL TIN CLAD FIRE DOORS

Save Buildings



Dependable Stremel Tin Clad Fire Doors will save thousands of dollars in property loss, insurance costs and prevention of business interruption . . . as it did when the Purina Mills storage building in Minneapolis burned recently. The Stremel Tin Clad fire Doors held, confining the blaze to the rear of the building.

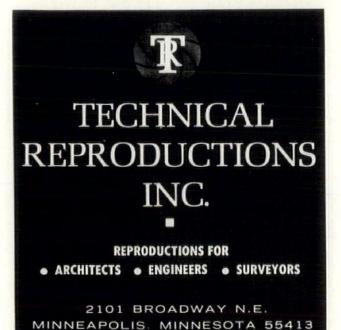
AUTOMATIC CLOSING PREVENTS FIRE TRANSITION THROUGH OPENINGS IN FIRE WALLS.

Metal & Tin Clad Doors & Grilles
(Approved by National Board Fire Underwriters)

STREMEL BROS. Mfg. Co.

260 Plymouth Ave. No.

Minneapolis, Minnesota 55411



PROGRESS.

through TESTING



Constructional Materials; Piling and Lumber; Foundation Soils

Twin City Testing and Engineering Laboratory, Inc.

662 Cromwell Ave. Tel. 645-3601 ST. PAUL, MINNESOTA 55114 Lakehead Testing Laboratory, Inc. 226 N. Central Ave., Duluth, Minn. 55807. Tel. 628-2295

611 Sixth Avenue N.W., Rochester, Minnesota 55901 Tel. 288-7060 4909 North Cliff Avenue Sioux Falls, S. D. 57104 Tel. 332-5371 1906 E. Broadway Bismarck, N. D. 58501 Tel. 223-6149 2105 7th Ave. No. Fargo, N. D. 58102 2003 Gateway Dr. Tel. 774-7412 Grand Forks, N. D. 58201 Highway 83 S. at Harrison Ave. Radio City Addition Minot, N. D. 58701 Tel. 838-6 Tel. 838-6674

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

Trenta Nove Anni Di Progresso





817 Vandalia St.

645-9321

St. Paul



Regency Hyatt House, Atlanta Architect: John Portman, Atlanta

A ROMANY-SPARTAN® FLOOR

for the nation's 'most talked about" hotel

The \$18-million, 800-room Regency Hyatt House in Atlanta's growing Peachtree Center is unique . . . to say the least. And Romany-Spartan ceramic tile played an important part in the decor of the 22-story-high lobby which is overlooked by balconied corridors. The lobby floor had to be tough enough to withstand the traffic of millions of feet. But it also had to have old-world charm

ROMANY SPARTAN

CERAMIC TILE

and graciousness. So Romany-Spartan Or-san® 11 Cork Tan heavy duty ceramic floor tiles were chosen . . . some 648,000 of them, covering 36,000 square feet. The 2"x4"x3/8" Orsan tiles were hand-set in fan-shaped patterns to create an old European cobblestone effect.

call or write:



Rollin B. Child, Inc.

DISTRIBUTOR

420 Excelsior Ave. West Hopkins, Minn. 55344 PHONE: 612-938-2785

Over 20 years of service to the construction industry for ceramic tile, carpets and related products.

BRIEF NOTES

Directory of Behavior and Environmental Design—Published by the Research and Design Institute, Providence, R. I., the directory provides a biographical listing of more than 250 professionals in 34 disciplines concerned with environmental design research and includes indices by both discipline and research activity and a listing of interdisciplinary journals on behavior and design. Order from Research and Design Institute, P.O. Box 307, Providence, R. I. 02901. Cost: \$3.

New Zoning Landmarks in Planned Unit Developments—Study on planned unit residential developments and their public and legal ramifications, covering landmark decision by Pennsylvania Supreme Court. Order from Urban Land Institute, 1200 18th St., NW, Washington, D. C. 20036. Cost: \$6.

New Spaces for Learning—Designing college facilities to utilize instructional aids and media. Published by Rensselaer Polytechnic Institute. Order from Educational Facilities Laboratories, 477 Madison Ave., New York, N. Y. 10022.

At the Convention, visit the exhibits, meet old friends, make new friends—and remember, you saw their products first in the Northwest Architect.

The Symbol of Quality Since 1896



SPECIALIZING IN

Ceramic and Quarry Tiles Marble and Slate

Northwestern Tile Company

925 West 80th St., Minneapolis, Minn. 55420

881-2678

W. L. Hall Co.

CUPPLES ALUMINUM ENTRANCES
WAUSAU ALUMINUM WINDOWS
HICKMAN ALUMINUM FASCIA AND
WATER DAM SYSTEM
KALWALL PANELS AND SKYLIGHTS
CHEMCLAD PLASTIC LAMINATE DOORS
TROPICEL DECORATIVE PANELS
FOLDOOR PARTITIONS AND DOORS
ALENCO DOUBLE HUNG AND SLIDING
WINDOWS

2816 Dupont Ave. So., Minneapolis

Twin City Tile and Marble Co.

219 East Island

Minneapolis, Minnesota



Gamble Building 5100 Gamble Drive—St. Louis Park Installation of Walnut Travertine Marble Baker Associates Incorporated

Place confidence in a firm long known for

- Quality Performance of labor and management
- Flexibility of operation through diversification of quality materials
- Guarantee of material and work
- Financial Strength



TERNE TODAY

The use of terne metal to plate steel as a protection against corrosion goes far back in structural history but today is still being used in modern designs. Weight, flexibility and other factors are considered by architects as they balance design needs against materials' characteristics, according to Follansbee Steel Corp., of Follansbee, W. Va., one of the producers of terne coated materials.

DOR-O-MATIC
SLIDE 'IN' SWING
AUTOMATIC SLIDING DOORS

S-L-I-D-E open graciously for prestige entrances...S-W-I-N-G open safely in any emergency! Fast, safe, convenient traffic flow for any building, every doorway. Panic release meets building codes.

SALES AND SERVICE

H. W. Staples Co., Inc.

2535 85th AVE. N.E.
MINNEAPOLIS, MINN.
PHONE 784-4445—AREA CODE 612

A funeral chapel, a country club and a residence are among recent designs in the Northwest which utilized terne metal to solve special problems and avail themselves of the material's special characteristics.

A significance in the chapel roof projections and twin elevated penthouse areas have been provided by Bettenburg, Townsend, Stolte & Comb of St. Paul, for the Simonet Funeral Home, Stillwater, Minn.

Preliminary designs called for brick covering in these areas but supporting the brick on wood framing presented a structural problem. The choice of terne metal was the answer. When painted a brown-olive the terne roof caps aided in unifying the brick veneer, the architectural whole and the surrounding land-scape.

Through their design of an attractive new clubhouse, cabana surrounded swimming pool and parking facilities for the Minnehaha Country Club in Sioux Falls, S. D., Harold Spitznagel & Asso-

Minnehaha Country Club in Sioux Falls, S. D.

ciates can take some degree of credit for doubling the number of active golf players since it was built.

The clubhouse replaced a fiftyyear-old structure dear to the hearts of the older members, requiring a major sales effort to put the new building and pool across.

An important element in the overall design of the country club complex is a Bermuda-cupola styled terne metal roof painted gray green, which serves to unify and cap the various elements of the complex and tie it in with the surrounding links. Terne's history for long-lasting weather protection and economy of maintenance played an important part in its choice.

Although the final cost of the total complex was approximately \$1,000,000, it has proved to be well worthwhile, according to club management. The pool has offered the avid golfer an opportunity to bring the family for the day,



The Weitz residence in Des Moines, Iowa



Simonet Funeral Home in Stillwater, Minn.

having the effect of a marked increase in actual golf playing.

In his design of a country residence in Des Moines, Iowa, Architect John D. Bloodgood achieved a harmonious marriage between a classic "old tin farm roof" with contemporary architectural design that relates to its surrounding rural setting.

The metal "planked" look in the large shed roof areas, recalling the farm roofs of earlier days, was achieved with a standing seam application of terne metal. When painted a gray-green, the roof unified the architectural elements and combined with the off-white stucco exterior and "barn" red entrance door.

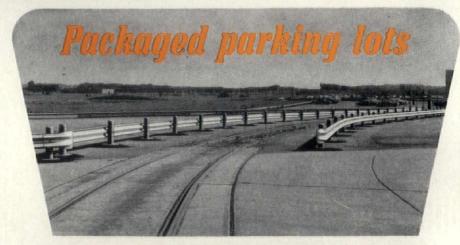
In the light of its use the stem of the word "terne" is interesting for it derives from words originated by and borrowed among several basic European languages meaning to tarnish! However, reference is to the dull finish which terne creates, resembling in the minds of those who borrowed the word a tarnished or dulled surface.

"Since 1883"

CARNEY

HOME COMMERCIAL INDUSTRIAL INSULATION SPECIALISTS

CARNEY & ASSOCIATES INC.
Box 1237 Mankato, Minnesota





Let us wrap up your parking lot . . . we can handle the whole job including suggestions on the best placement for Century Guard Rail. It provides excellent "in-out" traffic control and maximum use of space while preventing vehicle damage to buildings, walks, lawns and shrubs. Rail sections are formed from semi-spring steel . . . super tough . . . yet safely cushions all impacts. Steel is galvanized for low maintenance . . . can be luminescent painted for night-time safety. We custom fabricate and install all components according to your layout. But if you only need Guard Rail, materials and services can be purchased separately.

Phone for FREE estimate - no obligation





Century Fence Company

1409 WEST COUNTY ROAD C . ST. PAUL, MINNESOTA 55113

PRODUCTS & SERVICES

CROSS-SECTION OF WHAT'S NEW

DAVIS TO REPRESENT GOODWIN ON TECHNICAL SERVICE

The Brick and Tile Division of Goodwin Companies Can-Tex Industries, a division of Harsco, has announced appointment of Gary

S. Davis as technical service representative for this lowa-based brick and tile manufacturing operation. Mr. Davis will provide technical service to the architectural, construction and agricultural

fields within the entire area in which Goodwin Companies operate.

A 1963 graduate of Iowa State University, Mr. Davis was previously director of Structural Clay

PRECAST TERRAZZO

STAIRS

COPINGS

BASES

BENCHES

SILLS

PLANTERS

FACIAS

MURALS

TILES



Grazzini Bros. & company

620 16TH AVE. SO. MINNEAPOLIS, MINN. PHONE 336-7735



Mr. Davis

Products Institute's Region 6 in Ames, Iowa, and will now office at 3810 Ingersoll in Des Moines, Iowa.

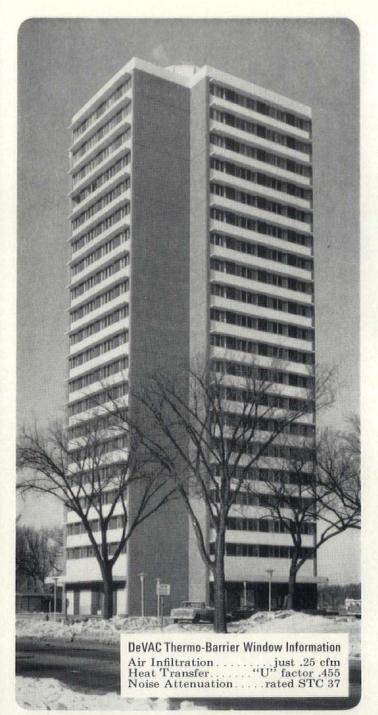
He is a member of The American Society of Agricultural Engineers, Soil Conservation of America and Construction Specifications Institute.

AUSTRIAN INVITATION

"The Magistrat of the Austrian Federal Capital, Vienna, invites American architects to participate in an international competition to obtain designs for the Vienna International Gardenshow 1974 (buildings included). All queries concerning details of the competition shall be addressed to the Stadtgartenamt, A-1010 Vienna/Austria. The competition ends on January 9, 1970.

Embassy of Austria Press and Information Department Washington, D. C."

NORTHWEST ARCHITECT



Above is Project 2-11A, Housing For The Elderly, Minneapolis, Minnesota. Architects for this twenty-floor apartment were Raugland, Entrikin, Domholt & King, Inc. of Minneapolis.

No First Class Building can afford Second Class WINDOWS

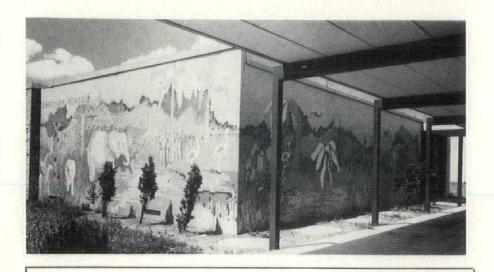
Health and comfort are important elements in the design of Project 2-11A, Housing For The Elderly in Minneapolis. Occupants of this 151 unit high-rise are particularly sensitive to changes in temperature and humidity. The interior climate must be kept comfortable. Drafts, dust, pollen and excess noise, kept out. That's one of the reasons all 456 windows are DeVAC Thermo-Barrier.

Unconditionally guaranteed for 10 years. Patented DeVAC Thermo-Barrier® Windows feature a non-structural thermal barrier. This rigid vinyl frame separation is not exposed to sunlight and is factory sealed. Means DeVAC Windows are both efficient and practical. Efficient . . . they actually permit smaller capacity heating-cooling plants. Practical . . . because anodized aluminum construction virtually eliminates window maintenance.

Be sure the first time around... many building owners are forced to call DeVAC for Replacement Windows all too soon. Why don't you specify DeVAC Thermo-Barrier Windows? For full details, fill in and mail the coupon below.



	Inc. Minneapolis, Mi	
Specific project in	e information on the subject formation and bid New 1 Architect's File Insert 1	ork Housing Study
	Types Sound Attenuation	Test Report.
NAME	Types Sound Attenuation	Test Report.
Aluminum Window T	Types Sound Attenuation	Test Report.



BURRIS



CONTRACT

FURNITURE SHOWROOMS

1132 STINSON BOULEVARD

MINNEAPOLIS

331-4421

COLORFUL TILE MURAL HAS JUNGLE THEME

A jungle motif, created with ceramic mosaic tiles, provides a colorful atmosphere for children attending Chapman Elementary School in Milwaukee.

The 500-square-foot mural area is frankly slanted toward a child's mystique, bringing a storybook aura to a garden-like entry. Durable ceramic tile is put to imaginative exterior use in this

contemporary setting.

Thousands of 1" x 1" Romany-Spartan ceramic mosaics were used to simulate lush jungle greenery and exotic plant and animal life. Architect Clinton worked with the United States Mochon wanted not only to bring a highly decorative dimension to the building but provide a psychologically stimulating environment for young students.

In executing the large mural, the Ceramic Tile Company's Architectural Design Service, which develops custom patterns based on a sketch or written description outlining the architect's needs. The service also provides research, where necessary, on specialized scenes for more specific requirements, such as historical murals.

Romany Spartan tiles are handled in this area, by the Rollin Child company in Hopkins, Minn.

STORE FIXTURE COVERED IN NEW SPEC

Architects and other designers concerned with store design are required to be, simultaneously, creative artists, merchandising experts and highly exacting technicians. For this reason, the National Association of Store Fixture Manufacturers has created. and recently revised a set of detailed standard specifications for store fixture construction.

These specifications are set forth in a comprehensive book, titled "Specifications for the Manufacture of Store Fixtures," which could be of value in the design of store facilities. It is available from the National Association of Store Fixture Manufacturers, 53 W. Jackson Blvd., Chicago, III. 60604.

NEAL SLATE TO REPRESENT WEYERHAEUSER PARTITIONS

W. E. Neal Slate Company of Eden Prairie, Minn., has been named a franchised fabricator-erector of Weyerhaeuser Movable Partitions for Minnesota, Iowa, Nebraska, North Dakota, South Dakota, Montana and Wisconsin. Neal Slate has been manufacturing and marketing architectural products since 1923, according to Wallace E. Neal, president.

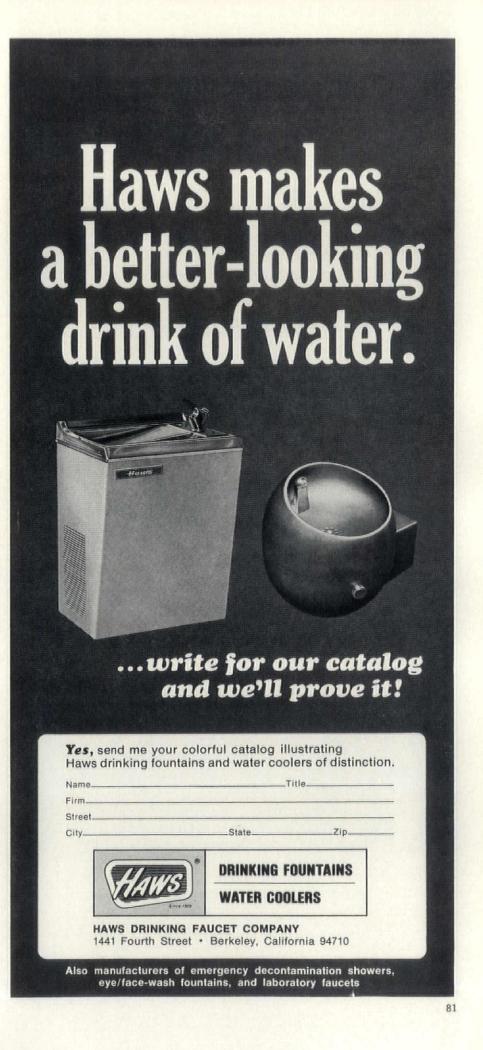
"'Phantom Walls' could be another term for the movable partitions," he said. "They can be dismantled and re-positioned many times to suit changing office requirements all with almost no



In the top picture Mr. Neal (left) reviews the Weyerhaeuser system with R. L. Kiewel, Weyerhaeuser area manager. The bottom picture shows Mr. Neal discussing installation procedures with Harry Chase, Weyerhaeuser engineer.

damage to permanent walls and floors.

"There are five types of Weyerhaeuser Movable Partitions, developed and engineered after years of research to meet individual needs. Three types use exceptionally strong, lightweight panels with expanded honeycomb core



constructed similar to modern aircraft assemblies.

"All partitions are fabricated in 4-foot modules to provide flexibility. Units are fastened at the edges with a special bolting system, completely concealed with colorcoordinated accent strips fitted into aluminum joint connectors. At the floor wall sections are attached to base runners and leveled with devices that can compensate for up to a 1-inch deviation in floor level.

"A choice of panel facings in

hardwoods, tackboard, blackboard, gypsum wallboard and fabric or vinyl is available.

"Every movable partition carries a complete Weyerhaeuser guarantee that covers materials, as well as the installation of the job. A unique feature of the standard version of the partition is that it can be completely installed without mechanical fastenings to the floor or walls in most cases-except for starter units and freestanding end units."

Mr. Neal said his firm can offer

additional services such as design and layout assistance, future relocation services and a continuing full services concept.

HAWS ANNOUNCES NEW STAINLESS RECESSED FOUNTAINS



A new series of fully recessed stainless steel water coolers, Models 84RC and 88RC, is now being manufactured by Haws Drinking Faucet Co., Berkeley, Cal. Both are ideal for hallways or anywhere floor space is limited.

Model 84RC, available in either 6 or 12 gallons-per-hour capacities, features a Haws water chiller hidden by a louvered stainless steel matching grille, and a Haws Model H3 chrome-plated, pushbutton-operated valve with self-closing automatic stream control, integral bubbler and optional condensation-proofing.

Model 88RC sports a trim hinged core grille to match the fountain finish, concealing the remote chiller below. Bubbler and valve are identical to 84RC; chiller yields 6 gallons-per-hour.

Comprehensive Haws spec sheets on these models present all standard and optional finishes. detailed dimensional drawings which show installation features and a selection chart which presents in tabular form such data as capacities, compressor size and condensing media and domestic shipping weights.

Copies of these spec sheets can be had from Haws Drinking Faucet Co., Fourth and Page Sts.,

Berkeley, Cal. 94710.



Royaline proudly announces this brand new 48" x 32" shower stall with integrally molded soap ledge and molded seat. Fiberglass and polyurethane sandwich construction.

More complete information on request

Royaline division COLE-SEWELL ENGINEERING COMPANY
2288 University Avenue, St. Paul, Minnesota 55114
Area Code 612 646-7873

UNIVERSITY OF WISCONSIN OFFERS TWO WORKSHOPS

The Department of Engineering of The University of Wisconsin-University Extension will conduct a one-week Metals Estimating Workshop November 10-14. The course is offered in cooperation with several technical associations and will take place on the University's Madison campus.

The ninth annual Construction Contracts and Specifications Institute will be presented by The University of Wisconsin and Region 7 of The Construction Specifications Institute on November 20-21 on the Madison campus. Requests for information should be directed to Dwight D. Zeck, Institute Director, 741 Extension Bldg., 432 No. Lake St., Madison, Wis. 53706.

VINCENT NAMES HORK SALES MANAGER OF NEW DIVISION

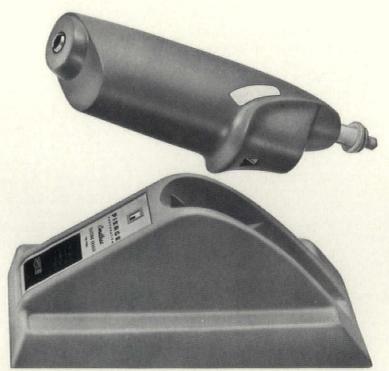
The appointment of Marvin Hork as sales manager of its new Building Products Division has



Mr. Hork

been announced by Paul M. Vincent, president of Vincent Brass & Aluminum Co.

The division will be responsible for development and implementation of programs for sales of architectural aluminum extrusions and the complete line of Reynolds Aluminum commercial building products, Mr. Vincent said. Gravel stop and fascia systems, curtain wall sections, bar, rod, channels, tees and tubes will be stocked in the mill finish aluminum as well as in the new Duronodic and Rey-



Meet the new featherweight Champ the Pierce electric! cordless! rechargeable! eraser!

You won't believe it until you see it, so why not let us bring one to your office. Feel the lightweight (11 oz.) perfectly balanced power that gives feathertouch erasing without scarring the paper.

It's cordless! You can use it anywhere, in any position. You completely eliminate the time-consuming frustration of tangled cords, drawings soiled by dirty wires, etc.

It's troublefree! Internal components are mounted on rubber pads to resist shock damage and protected against dirt by a sealed Cycolac* housing – the same durable mate-

rial used in telephone casings.

The holder (4½" x 8" x 3½")
does triple duty. It's also
a recharger that keeps
your eraser fully powered and includes a
utility tray for
pencils and
other
implements!

New Space Saver from HAMILTON

The new Dial-a-Torque, with power option, has made space-saving and Hamilton synonymous. If you are in the market for a drafting table, get the one that looks better and takes less space. You'll like its many high-efficiency features too. Call us if you would like to see and operate a new Dial-a-Torque for yourself. We have them on display and can give you full details and prices on many options and models.



WHITE PRINTING, DRAFTING EQUIPMENT, SUPPLIES, SERVICE

MINNEAPOLIS - 817 Marquette Avenue, 338-7655 ST. PAUL - 519 Wabasha, 222-4476

*Registered T.M. of Marbon Chemical Company

no-color finishes.

The newly created division will also expand services in the area of copper, aluminum and stainless steel products.

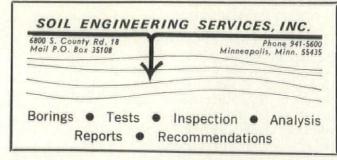
TV HELPS GUARD WORLD'S LARGEST OFFICE BUILDING

"To catch a thief" in the Pan Am Building, world's largest commercial building, is a formidable task. The problem includes keeping surveillance over a 59-story building with 60 acres of offices, traffic control of 17,000 permanent daytime residents and another 250,000 persons using its facilities or passing through the building every work day of the year. Security must cover 65 passenger and freight elevators, in addition to 21 escalators.

According to Thomas Kyle, assistant manager in charge of security for the Grand Central Building, Inc., which owns the Pan Am Building, probably the single most important piece of equipment which helps security personnel to stop theft is the Panasonic closed-circuit television (CCTV) system. Mounted above strategic areas, TV cameras continuously focus on the loading dock, freight elevators, entrances and exits to the building, escalators and other important places.

One camera keeps its lens on the well-known Lippold sculpture, made of wire and easily broken if mishandled. The TV camera helps keep visitors from plucking the wires or damaging the sculpture.

Another use for TV cameras, especially those placed on escalators, is to control crowds. If



the escalators become crowded in one area, the console attendant can immediately shift the escalators' direction in such a way that the crowds can be better transported.

As risks increase in major buildings use of closed circuit TV is expected to be used more and more.

NEW GROUT DEVELOPED BY TILE COUNCIL

Mastic Grout, an "instant" grouting compound designed especially for use with dry-set glazed wall tile, is the latest development of the Tile Council of America's Research Center. It comes ready to use from the can and does not require the addition of water, sand or cement, according to its developers.

"The pre-mixed composition of organic and inorganic materials works on a water-loss principle; that is, it hardens by coalescence of polymer particles when water is lost through absorption to tile edges and backing material and through evaporation," explained Dr. J. V. Fitzgerald, director of the research center.

Read our ads—Patronize
Our Advertisers

"Mastic Grout is stain-resistant," he said. "It has an infinite pot life, permitting a tile setter to save unused portions for another job on another day, and it dries to form a tough and resilient tile joint that won't powder or flake."

Portland cement is the base for most grouts that are used with wall tile. These grouts are considered "tried and true" and, in the opinion of the Tile Council, they are.

"Portland cement-base grouts harden by hydration, making it imperative that the ratio of water to cement is exactly right. It is imperative also that the rate of water loss be controlled, for hydration is not an instantaneous reaction.

"When used with dry wall tile, therefore, either the tiles must be soaked before grouting or a special portland cement grout with an ingredient that makes it waterretentive must be used, this because dry tiles are absorptive and will draw water from the grout. It is for this reason that Mastic Grout is ideal for dry wall tile installations, says the Tile Council, for the faster it dries, the faster it hardens.

Technical details can be obtained from the Council at 800 2nd Ave., New York, N. Y. 10017.

HOPE'S WINDOWS, INC.
THE ADAMS & WESTLAKE CO.
MILCO WINDOWS, INC.
PROTECTIVE TREATMENTS, INC.
AMERADA GLASS CO.
AR-LITE PANELS
PANELS PLUS

Represented by

Geo. Gohlke Co.

5407 Excelsion Blvd.

920-129

Minneapolis 55416

MANKATO STONE

Represented by

RAY F. HORWATH

Telephone 777-3600

and

DICK NOLAN

Mankato, Minn. Tel. 387-7978

IOWA

The magnificent new C. Y. Stephens Auditorium at lowa State University, Ames, was dedicated recently in festive ceremonies, including a concert by the New York Philharmonic conducted by Seija Ozawa. In an appreciative and laudatory review of the building and of the concerts the Minneapolis Tribune inexplicably failed to mention the architects of this \$5 million masterpiece; they were Crites and McConnell of Cedar Rapids and Brooks, Borg and Skiles of Des Moines.

A matching two-story wing, designed by **Rossiter and Hamm** of Dubuque, is being added to the 130-year-old courthouse in Galena, III.

A comprehensive plan for the improvement and beautifying of downtown Glenwood has been prepared by Mitzu Kawamoto, Omaha architect.

A half-million dollar addition to Dr. MacDonald's Vitamized Feed Co. in Fort Dodge has been designed by Maiwurm-Wiegman of the same city.

SOUTH DAKOTA

The new Stanley County Courthouse, to be built in Fort Pierre at an estimated cost of \$425,000, was designed by **Meese & Foss, Inc.,** Huron.

An architect, **Robert Gay**, has been named to the nine-man planning commission of Rapid City.

A new Campus Center for Huron College in Brookings has been designed by **The Spitznagel Partners** of Sioux Falls.

Bison is to have a new bank which will be designed by Robert D. Gay of Rapid City.

NORTH DAKOTA

A 30-unit townhouse condominium for Fargo is being constructed by Town Houses, Inc., a corporation formed for the purpose by the contractors and the architect, **Kenneth R. Johnson**.

The recently-completed Bismarck Civic Center was designed by the long-established firm of **Ritterbush Brothers**. Robert Ritterbush, Jr., is the son and nephew of the founders, both of whom are living. His father was named a Fellow of the American Institute of Architects at the recent convention in Chicago. Associated with Robert, Jr., is Merlin E. Rudrud

"The richer one becomes in wisdom the shorter becomes the time in which to use it." Alan Paton

"Wealth is energy compounded with intellect's knowhow." Buckminster Fuller



R&0

ELEVATOR CO., INC.

Elevators

Passenger and Freight Hydraulic and Electric Residence Lifts Dumbwaiters

Material Handling Equip.
 Platform Lifts
 Dock Levelers

Complete repair and service department for all makes— 24 hour service.

For Free Estimate and Specifications

Write 6045 Pillsbury Ave., Mpls.

10

Call 861-3377

Minneapolis Blue Printing Co.

Agents for Keuffel & Esser Co. of New York



Architects and Engineers Supplies Blue Prints and Photostats



332-5444

612 Third Ave. So.

Minneapolis 55402

Rich-McFarlane Cut Stone Co.

Quality Cut Stones for Over 40 Years

LIMESTONES - GRANITE

CUT STONE
FLAGSTONES
RUBBLE
VENEER

2707 26th Ave. So., Minneapolis, Minn.

729-1256

728-1870

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Act of October 23, 1962; Section 4369, Title 39, United States Code) 1—Date of filing, October 1, 1969. 2—Title of Publication, Northwest Architect. 3—Frequency of issue, Bi-Monthly. 4—Location of known office of publication, 2642 University Avenue, St. Paul, Ramsey County, Minnesota 55114. 5—Location of the headquarters or general business offices of the publishers, Minnesota Society of Architects, 514 Foshay Tower, Minnesota Stude, 6—Names and addresses of Publisher, Editor, and Managing Editor, Publisher, Bruce Publishing Company, 2642 University Avenue, St. Paul, Minnesota 55114: Editor, Fred Miller, Jr., Minneapolis, Minnesota: Managing Editor, None.

7—Owner—
Bruce Publishing Co., 2842 University Ave., St. Paul, Minn. 55114
Minnesota Society of Architects, 514 Foshay Tower, Mpls., Minn.
55402. 8—Known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities. None.

10—This item must be completed for all publications except those which do not carry advertising other than the publisher's own and which are named in sections 132.231, 132.232 and 132.233, Postal Manual.

Each Is	No. Copies sue During 12 Months	Single Issue Nearest To Filing Date
A. Total No. Printed B. Paid Circulation	5,000	4,900
2. Mail Subscriptions	4,186	4.210
C. Total Paid Circulation D. Free Distribution (including samples)	4,186	4,210
by Mail, Carrier or Other Means	520	524
E. Total Distribution (Sum of C and D) F. Office Use, Left-Over, Unaccounted,	4,706	4,734
Spoiled After Printing	294	166
G. Total (Sum of E and F)	5,000	4,900
I certify that the statements made by me plete. Fred Miller, Jr. Editor.	above are	correct and com-

Directory of Suppliers Personnel

The following listings of current advertisers' personnel is set up for the convenience of architects and others who may wish to contact companies for materials' equipment and services. The company name is listed in boldface type, followed by the headquarters address and phone number. Representatives are then listed by name; in the case of those not working out of the headquarters office, the rep's local address and phone number, when available, are also given. Comments for the improvement of these listings in serving our readers are welcomed.

American Artstone Co.—New Ulm, Minn. 354-5011 A. M. Altman William Toberg Floyd Saffert

Anchor Block Co.—2300 North McKnight Rd., North St. Paul, Minn. 55109, 777-8321 Richard C. Schumacher Fred B. Strauss

Andersen Windows—Bayport, Minn. 439-5150 Jim St. Onge—2126 Beam Ave., St. Paul Michael D. Hanley—723 S. 14th Street, Fargo, N. D. James Berg—824 South Day Ave., Sioux Falls, S. D.

Architectural Concrete, Inc.—Saint Paul, Minn. 55113 644-7234 Robert S. Herbst, Jr. Robert W. Andersen Duane D. Overby

Architectural Metal Association of Minnesota—4725 Excelsion Blvd., Minneapolis 55416, 926-4393

Arrigoni Bros. Company—817 Vandalia, St. Paul, Minn. 55114 645-9321 Joe Arrigoni Tom Graig Si Brannan

Bladholm Bros.—Osseo, Minn. 55469

B M D & R, Inc.—7020 Walker St., Minneapolis, Minn., 55416, 929-4658 Charles J. Duepner Louis J. Riegert

Carney & Associates, Inc.—P.O. Box 1237, Mankato, Minn., AC 507-345-5035
H. E. Carney, Jr., President and Sales Manager.
T. P. Walters, General Manager and supervisor of commercial sales, metal building insulation, etc.
William C. Duane, Chief Engineer and supervisor of industrial sales, refrigeration, ovens, etc.
Russell J. Karlson, R.R. #3, Spirit Lake, Iowa. AC 712-336-2743
John F. Notzen, Wisconsin sales, 5958 W. Leland Ave., Chicago, Ill. 60630 AC 312-545-9738.
Gordon Benrud, P.O. Box 1163, Bismarck, N. Dakota. AC 701-223-9293

Century Fence Co.—1334 Lincoln Ave., Waukesha, Wis. 53186 1409 W. County Rd. C, St. Paul 55113

Rollin B. Child Company—420 Excelsior Ave. W., Hopkins, Minn., 938-2785.
 Rollin B. Child Donald L. Fowler

Cole-Sewell—2288 University Ave., St. Paul, Minn. 55114 Herb R. Sewell

ConPro, Inc.—University at 30th Ave. N.E., Minneapolis, Minn. 55418 (612) 781-9583 LeRoy Nelson Fred Knudsen

Dale Tile Co.—Hwy 100 & France Ave. N., Minneapolis, 533-8631
W. E. "Ernie" Haines, ceramic tile, slate and marble Gerald A. Person, St. Paul, acoustical ceilings
Thomas C. Hungling, Minneapolis, acoustical ceilings

DeVAC Inc.—10130 Highway 55, Minneapolis, Minn. 55427 Tel: 545-0241 A. P. Grill, Sales Manager Al Kirchoff Walt Hudoba Ron Saiko J. F. Cook Co., 2320 W. Greenfield, Milwaukee, Wis. 43204 John Zaleski

Devoe Paint Co.—3550 Beltline Blvd., St. Louis Park, Minn. 55416, 929-0337 Bob Price

Drake Marble Co.—60 Plato Ave., St. Paul, 222-4759 John P. Wallner F. Denton White Archie Atkinson

Duwe Precast Concrete Products—P.O. Box 1277, Oshkosh, Wis. 54901 Area Code 414-231-3980 Rep. Besco, Inc., St. Paul 644-0881

Carl W. Fogelberg Co.—1595 Selby Ave., St. Paul, Minn. 55104, 646-7306 Carl Fogelberg Harry Hadd

Globe Office Furniture Co.—1011 Marquette Ave., Minneapolis, Minn. 55403, 336-4641 Gerald M. Loomis James E. Doyle Irving L. Nielsen William P. Thul

Geo. Gohlke Co.—5407 Excelsior Blvd., Minneapolis, Minn., 55416, 920-1292 Geo. Gohlke

Goodwin Companies
George E. Haverkamp, 268 So. Plaza Bldg., 100-12 Plaza,
Minneapolis, Minn. 55416, 544-2422

Gopher State Silica, Inc.—Le Sueur, Minn.
The Potter Supply Company, 463 Como Ave., St. Paul, Minn.
55103, 488-5553

Grazzini Bros. & Co.—620 16th Ave. So., Minneapolis, Minn. 55401, Phone—336-7735
Gene Grazzini, Sr.
Gene Grazzini, Jr.
Bill Marcantelli
Bob Hoeppner

W. L. Hall Company—2816 Dupont Ave. So., Minneapolis, Minn. 55408, 827-2839 W. L. Hall

Haws Drinking Faucet Co.—1441 Fourth St., Berkeley, Calif. 94710
A. C. Bjirken & Assoc., Room 216-A, 7615 Metro Blvd., Minneapolis, Minn. 55424 Area Code 216-941-2695
J. R. Petley Co., 759 N. Milwaukee St., Milwaukee, Wis. 53202

Hebron Brick Co.-Hazen, North Dakota 58638

Inland Supply Company—1096 Raymond Ave., St. Paul, Minn. 55108, 645-4931 Harold R. Anderson

Kindem and Sons, Inc.—83rd & Grand Ave. So., Minneapolis, Minn., 884-3561 Don Bleise

- MacArthur Company—936 Raymond Ave., St. Paul, Minn. 55114, 646-2733 Win Brown Oscar Hallgren
- Mahin-Walz, Inc.—4309 Shady Oak Rd., Hopkins, Minn., 935-7759 Robert Mahin Dale Lommen
- Mankato Stone Company—Mankato, Minn. 56001 Ray F. Horwath, 1540 McKnight Rd., St. Paul 55119, 777-3600 Dick Nolan, Mankato, Minn., 387-7978
- Marvin Windows, Warroad, Minn. Morris Taylor
- Minneapolis Blue Printing Co.—612 Third Ave. So., Minneapolis, Minn. 55402, 332-5444 Roger C. Thomas
- Minneapolis Gas Company—739 Marquette Ave., Minneapolis, Minnesota
 Industrial & Commercial Sales Dept—
 Warren L. Waleen, Manager, 372-4642
 Chester J. Potasek, Senior Sales Engineer, 372-4645
 Walter R. Murray, Architect-Engineer Representative, 372-4649
 Earl Bartels, Supervisor, Sales Engineering, 372-4641
 George Foehringer, Supervisor, New Business Sales, 372-4636
 Sten Johanson, Department Co-ordinator, 372-4648
 Warren Williams, Hotel & Restaurant Sales, 372-4635
 Allen Sturgeon, Commercial Sales, 372-4628
- Minnesota Concrete Products Assn.—1821 University Ave., St. Paul 55104, 646-2893 Allen B. Benzick
- Minnesota Concrete Products Association—1821 University Ave., St. Paul, Minn. 55104 Allen B. Benzick, Executive Secretary 646-2893
- Minnesota Lathing & Plastering Bureau—795 Raymond Ave., St. Paul, Minn. 55114, 644-3022 or 869-1377 Clint Fladland
- Molin Concrete Co.—885 W. Minnehaha, St. Paul 55104, 488-2541 Bill Molin Dick Olsen
- W. E. Neal Slate Company—7975 Wallace Road, Eden Prairie, Minn. 55343 John S. Staum
- Northern Natural Gas Co.—2223 Dodge St., Omaha, Neb. 68102 Bill Quinlan Bob McChane
- Northern States Power Company—414 Nicollet Ave. So., Minneapolis, Minn. 55401, 330-5500 E. F. Henn, 330-5693 O. C. Oberg, 330-5762

J. R. Werket, 360 Wabasha St., St. Paul, Minn., 221-4150

- Northwest Terrazzo Association—2583 University Ave., St. Paul, Minnesota, 646-8761 or 776-8322 Otto Biagini
- Northwestern Tile Company—925 W. 80th St., Minneapolis, Minn. 55420, 881-2678 Thomas A. Gramling
- Ochs Brick & Tile Company—Springfield, Minn., 723-4221 Clarence Hoekstra, Sales Mgr., 4741 Chicago Ave. So., Minneapolis, 922-6542 Al T. McNiece, 866-8338 Joe Whalen, 533-7285 Roy Warmdahl, 473-8688 Clarence Blue, Springfield, Minn., 723-4221 A. E. Rogotzke, Springfield, Minn., 723-4221
- Perl-Tile Company—660 19th Ave. N.E., Minneapolis, Minn. 55418, 789-3539
 R. F. Chadwick
 Ted Dietrick
 Calvin Westphal

- Piping Industry Development Council
 Roy West, 100 E. 14th St., Minneapolis 55403, 335-6581
 Don Magnusen, 614 American Nat'l Bank Bldg., St. Paul
 55101
- Portland Cement Association—1490 Northwestern Bank Bldg., Minneapolis, Minn. 55402, (612) 338-8977 Robert A. Boyer Lee A. Hanson Kenneth A. Meyer James A. Glick, 2740 Edgewood Drive, Fargo, N. D. 58102 (701) 232-8266 Henry V. Mott, 1126 N. Huron, Pierre, S. D. 57501, (605) 224-8366 Dean C. Patterson, 370 Lunar Lane, Bismarck, N. D., 58501 (701) 223-4778 D. J. (Sam) Whitlock, 10 Roblen Court, Mankato, Minn. 56001 (507) 388-4269
- Prestressed Concrete, Inc.—2582 Long Lake Road, Roseville, St. Paul, Minn. 55113, 633-4175 Earl W. Brink Curtis D. Pederson Richard J. Dybevik Kenneth D. Anderson
- R & O Elevator Co., Inc.—6045 Pillsbury Ave. So., Minneapolis, Minn., (612) 861-3377 Hugo Hillstedt Wayne W. Harmon
- Rich-McFarlane Cut Stone Company—2706 26th Ave. So., Minneapolis, 729-1256 John R. McFarlane
- H. A. Rogers Company—817 Marquette Ave., Minneapolis, Minn. 55402, 338-7655 or 222-4476
 D. W. Brown
- J. L. Shiely Co.—1101 No. Snelling Ave., St Paul 55108, 646-8601 Lowery J. Smith John E. Palda
- Snow-Larson, Inc.—204 Humboldt Ave. No., Minneapolis 55405 (612) 374-1216 Bob Snow Dick Larson
- Soil Engineering Services, Inc.—6800 So. County Road 18, Minneapolis 55435, 941-5600
- Spancrete Midwest Company—Osseo, Minn., 339-9381 or 425-5555
 David W. Hanson William C. Arons James G. Bublitz Jack G. Cain Wesley C. Ellis David C. Punt
- Staples Co., Inc., H. W.—2535 85th Ave. N.E., Minneapolis, Minn., 784-4445
 Henry W. Staples
 Don Skoog
 Ron Hanninen
- Stremel Bros Mfg. Company—260 Plymouth Ave. No., Minneapolis, Minn. 55411, 339-8261
 E. H. Siems
- The Trane Co.—930 E. 80th St., Bloomington, Minn. 55420, 884-3521
 Robert H. Owens, Manager
 Richard D. Cramer, Manager, Engineering Sales
 Joseph G. Skach, Manager, Industrial Sales
 Robert A. Erickson, Manager, Dealer Sales

 (Continued on Next Page)

Thomas M. Clark, School Market Specialist
Richard J. Baumgartner
Joseph W. Bouchard
Philip D. Freeman
P. Dan Gilbert
Robert H. Griffiths
David R. Hodgson
Clifford P. Kasdorf
Gerald W. Munro
Robert J. O'Brien
Ivars Packs
Richard P. Romer

Floyd H. Thomas, Service Dept. Mgr. Tel.: 866-2241

Trussbilt—2575 Como Ave., St. Paul, Minnesota 55108, 646-7181 or 645-7711

Saint Paul-Minneapolis

Jerry Langevin
Al Sorensen
Walter Gibis
Bill Legel
Dick Ruckmar
Phil Neff, Egger Steel Company, 909 So. 7th Ave., Sioux
Falls, S. D., 336-2490
Grant Whitford, Burke Engineering Sales Company, 4129
Perry Way, Sioux City, Iowa, 255-5091
Ken Swanson, Swanson Gentleman, Inc., 224 E. Grand Ave.,
Des Moines, Iowa, 244-0186
Charles Ackley, Ackley-Dornbach, Inc., 2308 No. 89th St.,
Wauwatosa (Milwaukee), Wis., 453-8050

Twin City Brick Company
E. W. Folsom, 1407 Marshall, St. Paul, Minn., 646-1335

Minneapolis

W. J Olson, 2824 Aldrich Ave. So., Minneapolis, Minn. 55408 J. H. Holmes, 2824 Aldrich Ave. So., Minneapolis, Minn. 55408 George Williams, 2824 Aldrich Ave. So., Minneapolis, Minn. 55408

St. Paul

Fred Miller, 1407 Marshall Ave., St. Paul, Minn. 55104 Roy Schwanz, 1407 Marshall Ave., St. Paul, Minn. 55104 W. L. Johnson, 1407 Marshall Ave., St Paul, Minn. 55104 Twin City Testing & Engineering Laboratory, Inc.—662 Cromwell Ave., St. Paul 55114, 645-3601 John F. Gislason

Twin City Tile & Marble Company—123-219 East Island Ave., Minneapolis, Minn. 55401, 332-8785 William J. Andre Elizabeth A. Hidding George W. Loahr, Jr. Esa Haataja Edward F. Robichaud

Venice Art Marble Company, Inc.—3158 Snelling Ave., Minneapolis, Minn., 724-5491 or 92

Wells Concrete Products
Leo Nesius, Wells, Minn., Phone 553-3139
Mike Trebtoske
Tom Matejcek
Frank Balcerzak, Mankato, Minn., Phone 345-4840

Zenith Glazed Products—Box 367, Osseo, Minn. 55369, Minneapolis: 612-425-4111; Omaha: 402-345-3424 M. G. (Brick) Brickson, Manager, 612-890-4790 Don MacDonald, Jr., Asst. Manager, 612-920-1391 Jim Kappes, Plant Superintendent, 612-544-2468 Yvonne Curtis, Office Manager, 612-425-2051 Jerry Olstad, Sales, 612-429-3913 Robert Snow, Sales, 612-823-5035 Richard Jackson, Sales, 612-489-2602

Ziegler, Inc.—901 W. 94th St., Minneapolis, Minn. 55420, 888-4121
Harry J. Rich—General Sales Manager
C. R. Shumacher—Manager, Engine Sales
Earl Phillips
C. L. "Chub" Troester
Terry Carlson—505 W. 37th St., Hibbing, Minn., (218) 262-1001

Zonolite Division, W. R. Grace & Co. 4725 Olson Highway, Minneapolis, Minn. 55422 R. E Dunham—Regional Manager W. W. Oas W. A. Garrison Al Mann

INDEX TO ADVERTISING

American Artstone Co 69	Globe Office Furniture 10	NECA 11
American Linen Supply 71	Gohlke, George 84	Northern Natural Gas. Co 12
Anchor Block Co	Goodwin Companies	Northern States Power CoCover II
Andersen Windowalls	Gopher State Silica, Inc 71	Northwestern Tile Co 75
Architectural Metal Association 28	Grazzini Bros. Co 78	Ochs Brick Co 60
Arrigoni Bros	Hall Co., W. L	Prestressed Concrete CoCover III
Bladholm Bros. CoBack Cover	Haws Drinking Faucet Co 81	R & O Elevator Co 85
BMD&R, Inc	Hebron Brick Co 59	Rich-McFarlane Cut Stone 85
Carney Co., The	Inland Supply Co 67	Rogers 83
Ceco Corp	Kindem Sons, A. A 14	Shiely Co., J. L
Century Fence Co	MacArthur Co	Soil Engineering Services 85
Child, Rollin B	Mahin-Walz	Spancrete Midwest
Cole Sewell Co. 82	Mankato Stone Co 84	Staples Co., H. W 76
	Marvin Windows 5	Stremel Bros 73
Con-Pro, Inc 6		Technical Repro 74
Cronco-Lite 69	Minneapolis Blue Printing 85	Twin City Brick Co 72
Dale Tile Co 67	Minneapolis-St. Paul Piping Council 57	Twin City Testing & Engineering 74
DeVAC Co 79	Minnesota Concrete Products 68	Twin City Tile & Marble Co 75
Devoe Co 72	Minnesota Lathing & Plastering	United Furniture Showrooms 80
Drake Marble Co 67	Bureau 70	Venice Art Marble Co 73
Fogelberg, Carl 72	Molin Concrete Co 31	Wells Concrete Co 33



GEO. E. PETTENGILL. LIB. AMERICAN INS.OF ARCH. 1735 NEW YORK AVE. N.W. WASHINGTON DC 20006NNA-CF

The designation of the contract of the second of the secon



Corefloor is designed to A.C.I. Code 318-63... tested and designed to 7500 psi. Corefloor.

...to meet the high standards of the northwest architect

