# Northwest Architect

LIBRAR

Mr. Robert Koehler(Hon.AIA)Editor
AIA JOURNAL/AIA 23-N-72
1785 Massachusetts Avenue

May/June 1973

telli E

# Sand with an FM of 2.70

It's bad, if what you really needed was sand

with an FM rating of 2.2.

Sand is nothing more than chips off larger pieces of gravel. But, because sand is a collection of "chips," there are literally thousands of sizes. That's why FM rat-

ings are important.

FM means "Fineness Modulus." It is determined by adding the percentage by weight of aggregate retained in a series of 10 sieves, then, dividing the total by 100. In other words, FM ratings are merely a means to achieve uniformity of grading. There is no good or bad rating, it all depends on

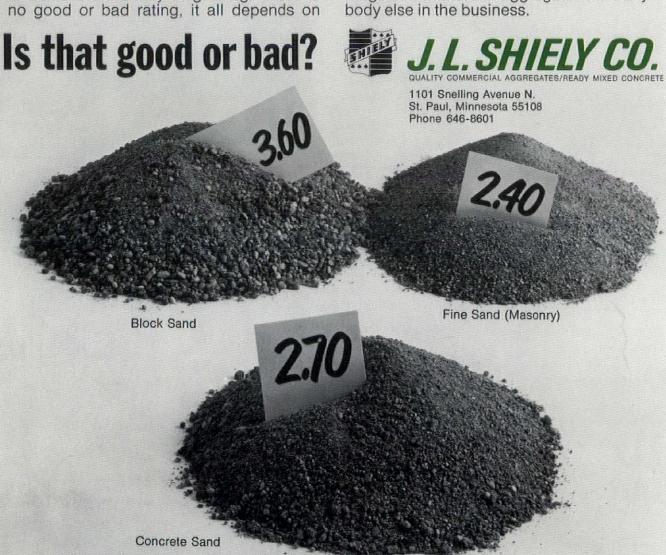
what you need.

At Shiely, we can deliver concrete sand, block sand, fine sand, asphalt sand or sand with exactly the FM rating you need. We can do that because we separate the basic product down to fine sand. Then, we blend back combinations of the various sizes to give you the desired uniformity.

In the winter, we go a step further. To make your job a little easier, we even have

heated sand.

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



## Northwest Architect

May- June, 1973 Volume XXXVII Number 4

Editor Bernard Jacob AIA

800 St. Paul Building Saint Paul 55102

Associate Editor Fred Miller, Jr.

Graphic Design Frank Kacmarcik

Northwest Architect is an official publication of the Minnesota Society of Architects.

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

Saul C. Smiley, AIA, President George F. Klein, Jr., Commissioner of Public Affairs

Northwest Architect Editorial and Management Committee

Edward A. Sovik, Chairman, Elizabeth S. Close, David B. Hall, Bernard Jacob, Phillip MacMillan James, James Lammers, Tom Martinson, Gene S. Peterson.

Published by Bruce Publishing Company Inc. 2117 W. River Road, No. Minneapolis, Minnesota 55411 Advertising Director Gregory C. Johnson 529-9105

Circulation Manager Shirley Galles

West Coast Representative Jay Eisenberg, J. E. Publishers Representative Co., 8380 Melrose Ave., Los Angeles, 90069

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

Northwest Architect is published bi-monthly. Controlled circulation postage paid at Minneapolis, Minnesota. Subscription: one year, \$5.00. In this issue . . .

Minnesota architects affect the nation. An invitation to Minnesota firms to submit examples of their work produced surprising results: 27 architects submitted 56 projects in 25 states and one foreign country. Many firms did not submit presumably many more projects. Nevertheless, the response was gratifying.

Although the Northwest Architect enjoys good support from its readers and advertisers, it does not have the resources yet to produce a 125-page issue. Therefore, it is necessary to divide the projects submitted in such a fashion as to present them in at least two issues. Many fair methods were attempted: alphabetical by architect, by locality, by state. In the end it was decided to use a great natural divider, the Mississippi. In this issue, then, are the projects west of the Mississippi, in the July/August issue those east of the Mississippi — and, if anyone has any diagrams on the layout of those famous Washington labyrinths, we'll publish them too!

Bernard Jacob

Hammel Named FAIA 98

Lundgren Elected AIA Vice-president 100

U of M's Center for Immigration Studies, by Rudolph J. Vecoli 102

Taliesen West Honored by AIA 106

Minnesota Architects Affect the Nation

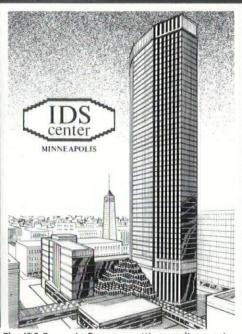
> The New Regionalism, by Bernard Jacob 112

**Book Reviews 129** 

Cover Photo shows a view of the Hodney/Stageberg Partners projects in the Micronesian Islands

# Hammel Named FAIA

# Carney 3 Lb. Density SOUND ATTENUATION BLANKETS



The IDS Tower in Downtown Minneapolis contains over one million sq. feet of Carney Sound Attenuation Blankets.

- A HIGHEST ACOUSTICAL EFFICIENCY.
- **☆** FIRE RESISTANT
- ☆ SPEEDY APPLICATION PRECUT FOR STANDARD STUDS.

CARNEY & ASSOCIATES, INC.

Box 1237

Mankato, Minnesota 56001 Phone: (507) 345-5035

POURING WOOL • INDUSTRIAL INSULATION MINERAL WOOL BLANKET BATTS

Newest area Fellow of the American Institute of Architects is Richard F. Hammel, principal in the St. Paul firm of Hammel, Green and Abrahamson, who was invested during the recent AIA convention in San Francisco. He is one of 64 new fellows honored this year and total listing of the FAIA's now numbers more than 1,000.

Mr. Hammel, when asked about his background, reported that he graduated from the University of Minnesota School of Architecture in 1944 and the

Harvard Graduate School of

Design in 1947, then:

"Employee R. E. Windisch, Architect, Honolulu, 1947-50. Assistant Professor, University of Minnesota School of Architecture, 1950, under then head, Roy Childs Jones, and at same time assistant to Winston C. Close, who was University's Advisory Architect.

"In 1951 I accepted a position with St. Paul schools as consulting architect to the system which, under the direction of Forrest E. Conner, superintendent, was emerging from 20 years of neglect. St. Paul's system in 1951 still had three



Northwest Architect



schools heated by coal-burning stoves in the classrooms.

"Met Curtis Green, who was employed by Haarstick & Lungren at the time, was designer for the Chelsea Heights School addition and also teaching at University of Minnesota. Decided to become partners and in 1953 started Hammel and Green after first obtaining permission to use basement of Green house in Golden Valley. Need for space increased, satisfied indirectly by purchase, on credit, of clothes drier, thereby releasing space previously devoted to the hanging of newly laundered clothes for use of architects.

"Although it seemed in 1953 that almost all the buildings which would ever be needed had already been built, several commissions materialized over the years. The resulting work, our policy of free coffee and

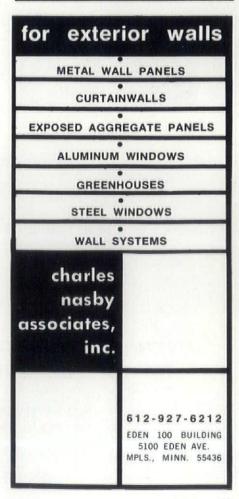
sweet rolls, the presence of Nancy Carlson, our secretary who was (and is) so pretty she didn't have to type, resulted in an increase in the labor force.

"Bruce Abrahamson joined up in about 1956, fresh out of Harvard, the Rotch Fellowship and a tour with SOM. Other good men came. Some left, like Jim Stageberg, Gene Freerks, Bob Sperl, George Klein, Hugh Peacock, Dave Nordale, Doug Baird and Dave Bennett. Some like Ted Butler, Richard Babcock, Lee Dahlen, Wes Sorensen, Ken Schultz and Dave Martin stayed to lay the solid foundation of our practice. Others like Vi Rice, our bookkeeper, kept us mostly solvent and Mary Tighe mostly honest.

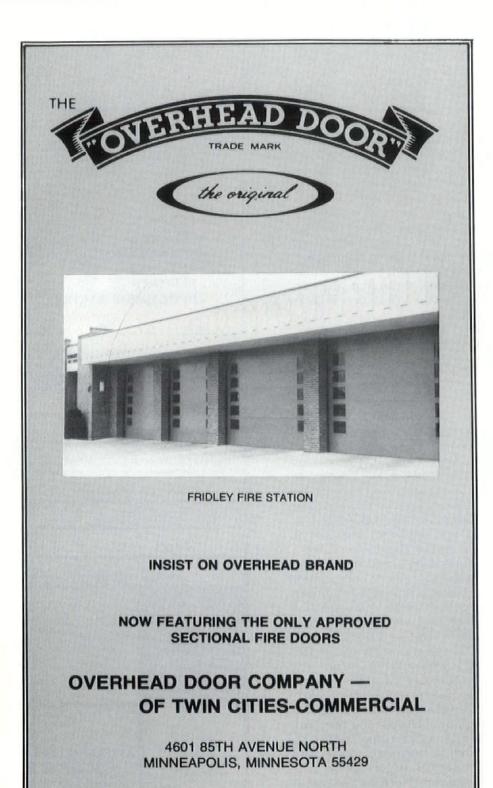
"So the team put together projects of many kinds, for clients in many places. Some have been favorably received by our peers, some by our clients. Projects such as the College of St. Benedict's Art Center, Bethel Seminary in Arden Hills, Highland Park Junior High School in St. Paul, followed by Highland Park Senior High School, the House of The Good Shepherd in North Oaks, junior high schools in Austin and Albert Lea began to be created by our team and built by the fine workmen of our area.

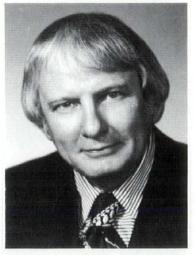
"These and many others laid the background for recent projects such as O'Shaughnessy Hall and the Fine Arts Building at St. Catherines, the Edyth Bush Memorial Library and the Paul Giddens Learning Center at Hamline, the major new secondgeneration high schools at Mound and Hopkins (Lindbergh), buildings which our group have a good feeling about."





#### Lundgren Elected AIA Vice-president





Louis R. Lundgren, FAIA, president of The Lundgren Associates, St. Paul, was elected vice-president of the American Institute of Architects at its recent convention. A member of the AlA for 24 years, Lundgren is a past regional director of the institute and past president of the Minnesota Society of Architects. As chairman of the Commission on Environment and Design, he coordinates the work of 10 committees and the National Policy Task Force. He has been active in educational facilities planning, urban design and played a major role in the revi-talizing of the St. Paul loop area. He has worked with many civic organizations and served some of them as an officer. He said his philosophy is to "work to make the institute a greater vehicle to utilize the many capabilities and talents for the betterment of society and the profession; to help improve our professional techniques so that all members, particularly the small office, can be more effective."

## WESTERN ELECTRIC vs. Stromberg-Carlson

# WHICH TELEPHONE SYSTEM GIVES YOU THE MOST FOR YOUR \$'s?



The best way to find out how a Stromberg-Carlson telephone system will save you money and increase the efficiency of your business is to call us.

If you have ten or more telephones with six or more lines, and we can't show you an improved system for less money, we'll give you a free telephone! You can't lose!



## **Blumberg Communication Systems**

Division of Blumberg Photo Sound Company

525 No. Washington Ave. 

Minneapolis, Minnesota 55401

Phone: 335-1271

# will your client like his roof or raise yours?... not if you specify...

"The metal with integrity

Specify COLORKLAD for fascia, standing and batten seam roofs, mansard roofs and other sheet metal finishes. We warrant COLOR-Mansard roots and other sheet metal mishes, we wallant obtome KLAD for twenty years against chalk, fade and color change. Upon request, we'll give you or your client this warranty in writing!

COLORKLAD is a sensational new roll-coated 24 ga. ARMCO galvanized sheet, armor plated with PPG's Duranar 200 fluorocarbon with KYNAR, bonded forever to the metal, and protected with a plastic

City

strippable film. Easily shop formed. Costwise, COLORKLAD is slightly less than shop or field painted galvanized (which usually fades or peels in five years or less). COLOR-KLAD is less than one half the cost of copper.

Happily, with COLORKLAD - which comes in six standard colors – the builder need not the needs for the project . . . readily available BRASS & ALUMINUM CO.



20 Year	THEO IN ALL FIFTY ST	ATES AND CANADA
ColorKlad - NOW DIS	Mail coupon to: Vincent Brass & Al Building Products 724-24th Ave. S.E d in receiving complete COLOF s, plus a sample.	luminum Co. Division Minneapolis, Mn. 55414 RKLAD information and
Please check:  I am intereste specifications  Have your lo	d in receiving completes, plus a sample.  cal architectural representative	contact me.
Name		
Company		_Zip _
Address (Street)	State	

## U of M's Center for Immigration Studies

By Rudolph J. Vecoli

The purpose of the center is to facilitate and encourage research regarding the phenomenon of international migration and its consequences. The particular focus of the center has been upon those migrations of the eastern, central and southern regions of Europe and the Middle East.

The major undertaking to date has been the creation of a national research facility focusing upon ethnic groups deriving from those European regions and the Middle East. Since the lack of documentary collections of source materials has been a major obstacle to the study of these groups, the Immigrant Archives was established as an integral part of the University Library to house and service such collections.

The director of the center has been responsible for the gathering of materials for the immigrant Archives. Through a staff of associates and research assistants a search has been conducted over the past seven years in the United States, Canada, and Europe for records which document the experiences of the immigrant-ethnic groups in all phases of life. Through splendid co-operation of these groups, valuable collections of church and organizational archives, personal papers, newspaper and periodical files, libraries of books and pamphlets have been donated as gifts to the Immigrant Archives. More than 20 ethno-linguistic groups are represented in the archives collections.

The curator of the archives and his professional staff are responsible for the processing, care and servicing of these collections. The archives' holdings include more than 10,000 volumes, 1,500 reels of microfilm and 500 linear feet of manu-

The Immigrant Archives constitutes a unique research facility Northwest Archite



# You don't have to know everything about irrigation. Just the first thing: Minnesota Toro.

You don't have to know about topography, soil or weather conditions. Or water conservation, safety, automation. Just trust all the irrigation details to the pro, Minnesota Toro. Toro is the leading designer and manufacturer of underground sprinkler systems for golf courses, parks, schools and large acreage homes.

We've got some great ideas, like: the Vari-Time central satellite control system for completely automatic turf irrigation; and the 640 series heads that pop below ground level when not in use — curbing accidents and vandalism.

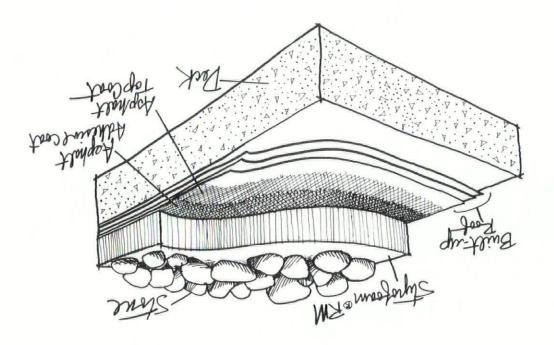
TORO

Call 544-0111. That's all you need to know.

Minnesota Toro knows the rest.



# IS IRMA REALLY UPSIDE DOWN?



# OR IS IT THE BEST WAY TO DESIGN A ROOF SYSTEM?

**IRMA** follows all the practical procedures of vapor barrier and waterproofing design that have been ignored on roofs for years. Vapor barriers should be on the warm side, cold side pressures should be vented and membranes should be protected from abuse and weathering. IRMA does all this at a practical price and comes with a 10 year warranty. What could be better?

DISTRIBUTOR FOR



EDWARDS SALES

for scholars interested in the study of American immigration and American ethnic groups. Among the kinds of research projects to which its holdings lend themselves are the immigrants' role in politics, in the church, in labor and radical organizations; the origin and development of ethnic institutions; ethnic contributions to music, drama and literature; and relations among ethnic groups. Anthropologist, folklorist, geographer, historian, linguist, political scientist and sociologist can find materials for their researches in the archives.

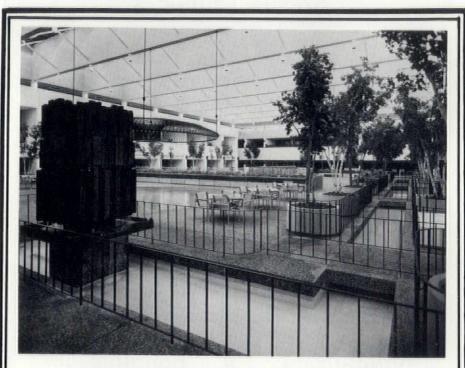
The archives' collections have been extensively utilized in research, both by scholars within and outside the University of Minnesota. A number of doctoral dissertations have been based upon research in these collections and several more are in process. In addition, a number of books, numerous articles, as well as many seminar papers have drawn upon the archives for their data. Scholars have come from all parts of the United States and Canada, as well as several from Europe, to

work in the Immigrant Archives.
A specific project administered by the center in conjunction with the Center for Research Libraries is the Ethnic Records Microform Project. It is the purpose of this project to develop a co-operative program for the systematic, continuing microfilming of the foreign language

press.

In addition to the substantial support provided by the university in the form of staff salaries and physical facilities, the center has received a number of grants, initially from the Louis and Maude Hill Foundation, more recently from the National Endowment for the Humanities.

Rudolph J. Vecoli is Director of the Center for Immigration Studies



# RUSTIC TERRAZZO AT THE RADISSON SOUTH

Contractors for Floors—Walls—Roof Decks



620 SIXTEENTH AVENUE SOUTH

MINNEAPOLIS, MINNESOTA 55404

■ TELEPHONE (612) 336-7735

#### Taliesen West Honored by AIA

Taliesin West, built in 1938 as a desert camp in Arizona by Frank Lloyd Wright, his asso-

ciates and students, received the

tion of architectural design of enduring significance, is restricted to structures at least 25 years old. Taliesin West, now the site

of the Frank Lloyd Wright School of Architecture and the south-

western headquarters of the ar-

chitectural firm that bears

Wright's name, is the fourth recipient of the honor.

This honor, given in recogni-

AIA's 25-Year Award.

#### BRICK / CEMENT / TILE / GYPSUM PRODUCTS

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

FACE BRICK — BUILDING SUPPLIES

AND SPECIALITIES —

STRUCTURAL GLAZED AND UNGLAZED

FACING TILE

CEMENT — LIME — COMMON BRICK

REFRACTORY MATERIALS

DRY WALL — THERMO POLYSTYRENE

RIGID INSULATION

INTERPACE FRANCISCAN TERRA-GRANDE

FLOOR AND WALL TILE

#### WUNDER-KLEIN DONOHUE CO.

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

### CORNING DONOHUE INC.

420 LAFAYETTE ROAD ST. PAUL, MINN. 55101 TELEPHONE 224-5571



#### WINONA TRAVERTINE

- FABRICATED AND INSTALLED BY -

#### **Drake Marble Company**

60 PLATO BLVD. ST. PAUL, MINNESOTA 55107 222-4759 ARCH: DYKINS HAWDFORD INC. MPLS.
CONTRACTOR: SWITZER CONST.
COMPANY, ST. PAUL

SAVINGS & LOAN OF

ST. PAUL, MINN.

In keeping with Wright's penchant for adapting his structures to their environment, Taliesin West was built in low profile of massive redwood timbers and stones gathered on the desert

stones gathered on the desert mesa it occupies just below McDowell Peak near Phoenix. Conceived as a tent-like structure to be used only for short periods during mid-winter, the drafting rooms, studios, dining areas and other facilities at Taliesin West were sheltered by canvas stretched over wooden roof trusses and beams. During that period most of the architect's time was spent at Taliesin

East, the house he designed in a rural area of southern Wisconsin.

As Wright and his associates came to use Taliesin West for increasingly longer periods each year, the complex of structures was expanded and some of its original components were replaced with more permanent materials. Translucent plastic was substituted for the canvas roofing. Still later, skylights of glass were set between trusses and installed along stone walls and in garden courts, expanding the view of the surrounding mountains and desert vegetation from the interior.

The redwood structures also were vulnerable to the ravages of the desert climate and Wright had begun to replace them with steel and to install decks of rein-

forced concrete before his death in 1959.

Describing the evolution of Taliesin West, Bruce Brooks Pfeiffer, curator of the drawings and archives at the Arizona insti-

tution says:

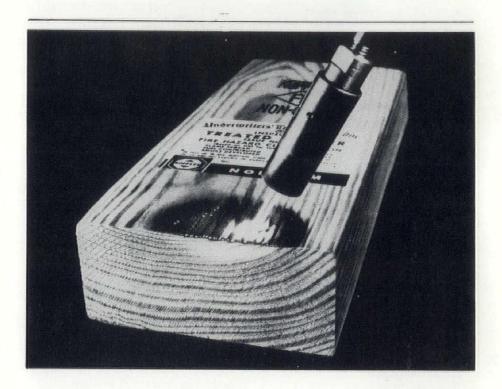
"When Mr. Wright was alive, not a day went by without his changing, improving, expanding these buildings and he left us a master plan for further development. He began to alter the landscaping within the compound of the buildings from desert cactus to more luxurious plants — establishing a citrus grove and palm garden and planting hibiscus, bougainvillaea, Italian cypress, grass lawns, flowering trees, gardens full of fresh cutting flowers for each season."

Wright's development plan is being executed by his widow, Olgivanna Lloyd Wright, who in 1932 was co-founder with him of the Taliesin Fellowship, which was conceived as a practical school for architecture and the allied arts and is now the Frank Lloyd Wright School of

Architecture.

Taliesin West was chosen for the award by the AIA's 1973 Honor Awards Jury. In announcing the selection the jury's chairman, Pietro Belluschi, FAIA, said:

"The years have not diminished the elemental quality of Taliesin West. More than other works by this master it shows how to grasp the mood of the land and transform it into a place of harmony and beauty. Here one understands the magic of man's primeval relationship to nature."



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

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

#### "WOLMAN"® SALTS FCAP By Pressure Process

Sure protection against rot, decay, and termites. Clean, paintable and workable with regular tools.

"WOLMAN"®

#### SALTS CCA-C Ageless, best for ground contact

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

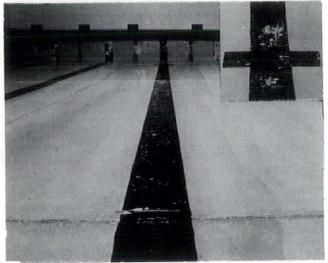
#### G. M. STEWART WHOLESALE LUMBER & TREATING CO.

THE UPPER MIDWEST'S LARGEST YARD

Phones: 378-1520 - 331-5543

421 JOHNSON STREET N. E.

MINNEAPOLIS, MINN, 55413



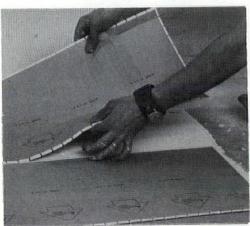
**Before** – pool surface is cracking and peeling (see inset). Pool needs daily cleaning and filtering system maintenance once a week.

# CERAMIC TILE ELIMINATES HIGH COSTS OF SWIMMING POOL MAINTENANCE.

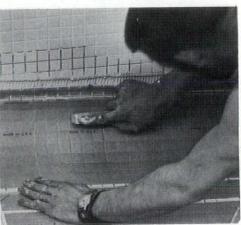
That's what officials at Park Senior High School, Cottage Grove, Minnesota, concluded when they totaled the cost of maintaining their painted pool from 1966 to 1972.

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

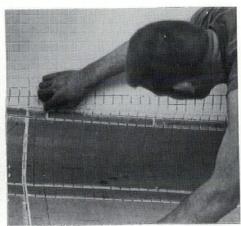
Officials decided to cut costs with Ceramic Tile early this spring. Now with work completed, they have a beautiful pool that will last indefinitely—with minimum maintenance.



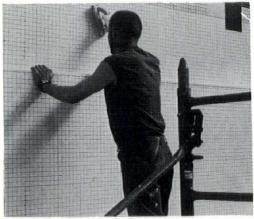
After sandblasting paint and cleaning surface, Ceramic Tiling begins.



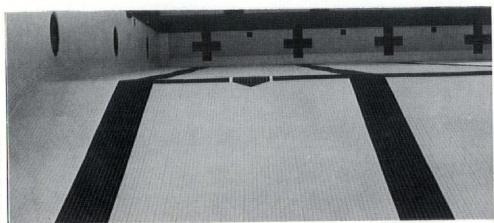
Guildset Craftsman beats Tile into setting bed for permanent installation.



Guildset Craftsman installs individual mitered Tiles for uniform finish.



Grouting completes installation of trouble-free Ceramic Tile.



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



OLD AS HISTORY—MODERN AS TOMORROW

MINNESOTA CERAMIC TILE INDUSTRY

# **Heat Recovery Equipment:**

Take a second look at it in our free booklet.



With Energy Conservation a major concern of every American, the recycling of heat energy in our commercial and industrial buildings takes on greater importance today than at any time in history. Energy Conservation through heat recovery makes good sense.

Saves energy—recovers heat waste for other uses.

Cuts costs — improves the environment, saves money.

If you are exhausting heat energy from your building, don't let it

go to waste. Recycle it through a heat recovery system that will fit your needs.

For more information, contact your consulting engineer or your gas company energy expert. And send for our free booklet:

#### Energy Conservation Through Heat Recovery

Write to: R. J. McChane, Northern Natural Gas Company, 2223 Dodge Street, Omaha, Nebraska 68102

Energy Conservation concerns us all.



# planning

Office Planning is usually considered when you add staff, remodel space or construct a building. At Business Furniture Incorporated your office plan will be given priority. That means, first, organization of space for a smooth running office, then the economy of good design and the recommendation of proper furnishing. You see, at BFI planning is more than the selection of furniture, it's a way of doing business.







it's the mason's trower.

#### Regionalism

By Bernard Jacob

The New Regionalism in architecture is of course no regionalism at all.

Regionalism at its best is illustrated by Bernard Rudofsky's examples of autochtonous, anonymous architecture, such buildings as the log cabins of northern Minnesota featured in an earlier issue of this magazine. The single greatest determinant of a regional expression in architecture today is climate. The domestic architecture of each region responds most readily to climatological demands. Thus housing on the West Coast is distinctly different from that on the East Coast or from that in the South. Fish houses in Minnesota are a good example of regional architecture: a response to the climate (or finding recreation away from home but with color TV in the dead of winter). In the Twin Cities in particular the climate has found its expression in the elevated pedestrian street, the skyway. In both Saint Paul and Minneapolis second level streets enable the pedestrian to walk great distances without being exposed to the elements, which in the winter of course is the next best thing to being in Florida. These bridges, walks, streets nevertheless connect very normal buildings to each other, buildings which could readily exist (and in some cases do) in New York, or Chicago or Seattle or Baltimore.

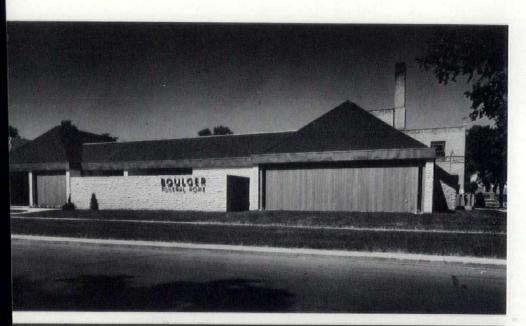
Technological developments, economic pressures and demands, the universality of architectural images have increasingly reduced available options and desirable alternatives. With the exception of the very special architectural patron, the typical demand is for efficient, sympathetic and highly practical

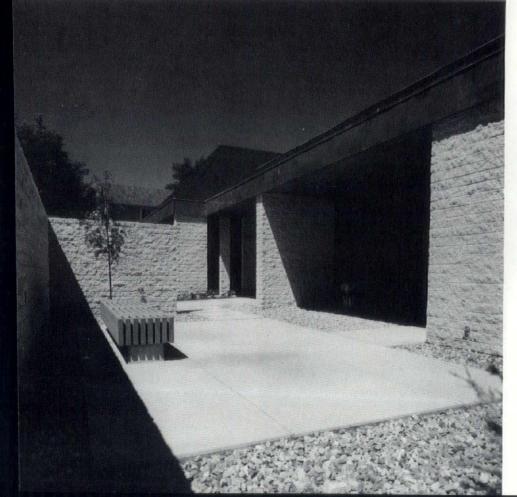
If there is no regional architecture per se, then there are no regional architects either. Out-of-state architects do work in

Minnesota and Minnesota architects do work out-of-state. They affect the nation by designing good, efficient buildings, by designing imaginative, powerful and handsome structures. Some architects have gained national reputations because of a building type which they have refined to poetic proportions. Some architects have clients who operate in many areas of the country. Others are sought because of their known competence and imagination.

imagination.
Whatever the motive or the specific incentives, Minnesota architects have broadened their practices to cover the country. Minnesota architects do not feel parochial or threatened or overlooked. They are well respected, sought after and often honored for their work. In an architectural world that is becoming increasingly smaller, Minnesota architects have established themselves solidly.

#### North Dakota





Boulger Funeral Home Fargo, North Dakota

Seifert & Staszko Associates, **Architects Planners** Bloomington, Minnesota

The 75- x 85-foot, one-story building features a massive roofline, interlocked by five pyramid shaped structures defining the public area from the private areas.

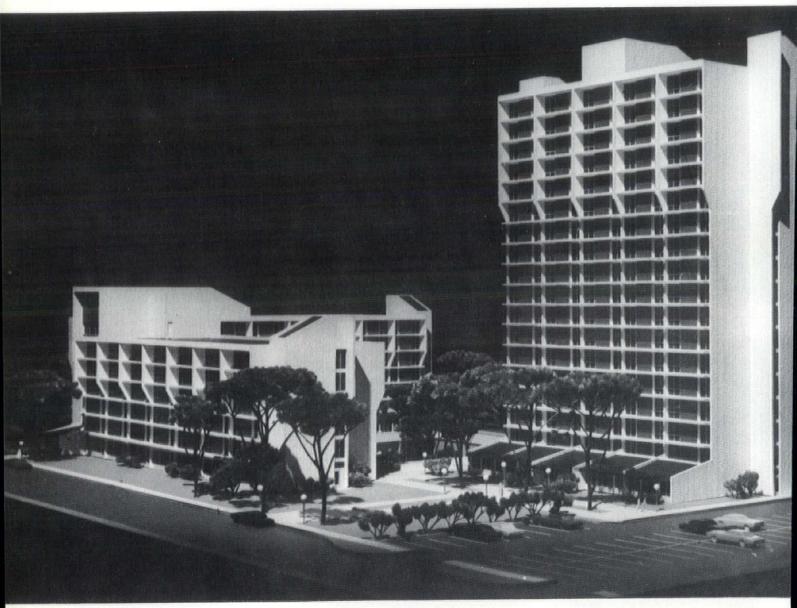
Exterior materials feature buff stone veneer with vertical cedar siding accent panels, capped by a wide horizontal copper facia. A walled-off court area provides privacy off the family room.

The building is a single-story structure with full basement, a large chapel divisible into two smaller spaces with adjacent family rooms, a central foyerreception area with fireplace, work areas and drive-through garage, all located on the ground floor. Space in the base-ment is divided into a lounge area, display area, work and storage areas.

The building has a concrete foundation, pre-cast concrete floor slabs at the first floor level and a fire retardant wood framing system. The site includes a

paved parking area.

#### Utah



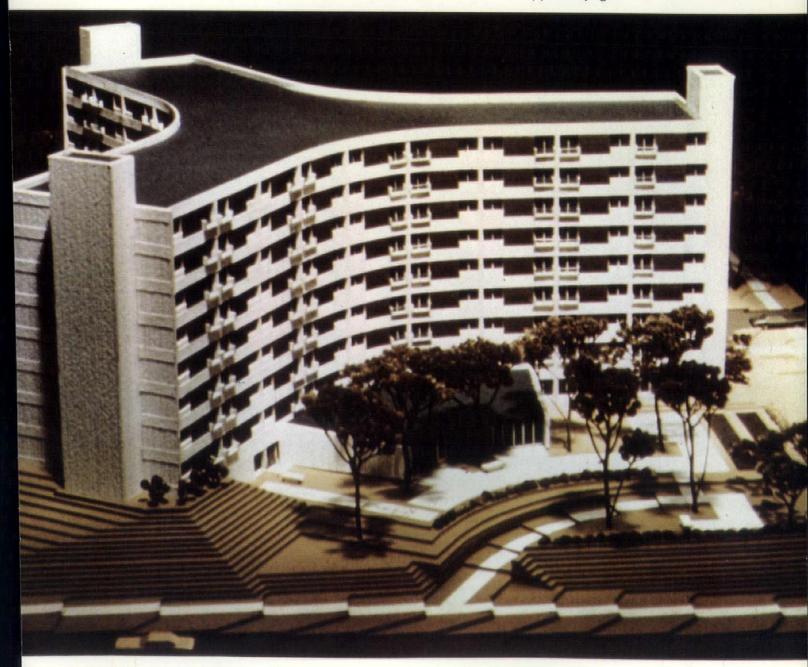
Housing for Elderly and Handicapped Salt Lake City, Utah

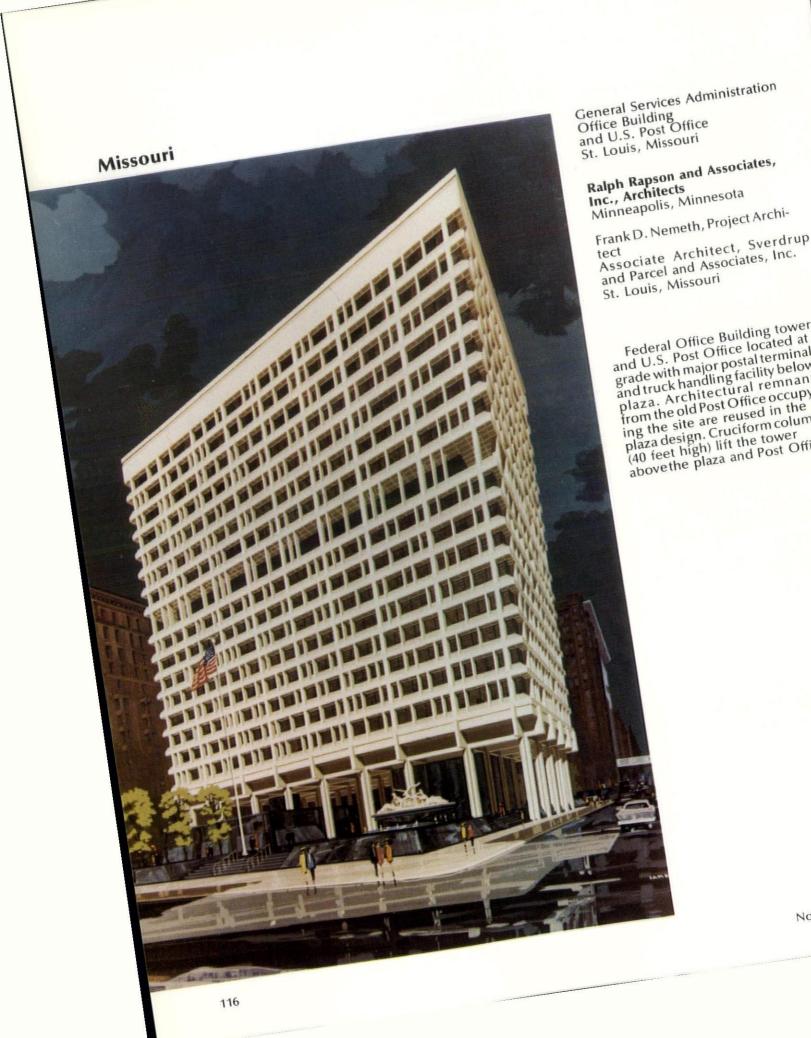
**Trossen Wright and Associate Architects** Saint Paul, Minnesota This 300-unit Housing for the Elderly and Handicapped Apartment Development features a sunken courtyard with meeting and activity rooms opening onto it and an arcade of shops and service stores. The 18-story highrise and the 7-story mid-rise buildings are connected at the court level by glass enclosed walkways.

Other, similar housing projects and hospitals are in Des Moines, Iowa, part of the Des Moines Model Cities Program, in Fargo, N.D., Wisconsin Rapids, Wis., Madison, S.D., Linton, Ind., Bismarck, N.D., Chariton, Iowa, and Grafton, N.D.

#### lowa

This is the Des Moines Model Cities project mentioned on the opposite page.





#### **North Dakota**



Jamestown College Library Jamestown, North Dakota

The Cerny Associates Minneapolis, Minnesota A learning resources center on the central grounds of a small liberal arts college. The client expected contemporary design and detailing to be sympathetic to turn of the century masonry structures on the central ground's periphery.

The building was formed and located to provide a broad edge for the larger mall space to the south. The staggered elements turning up to include Orlady Hall present the sloped back sides of the skylights to this area, now surrounded only by buildings of the same character. The new area to the north is bounded by the vertical faces having the skylight glass at the top in a rigid horizontal and ver-

tical pattern. This treatment complements Westminster and Kroese Halls' horizontal expressions.

Circulation is provided through the building by way of an interior street. This route is historically a heavily traveled one between the union (Westminster) and Orlady Hall. Located along it are various uses and access points to the library proper and temporary classroom area.

Material usage on the exterior includes brick, limestone for bands and sills, copper fascias and roofing slates. All match the general range of materials of the older buildings.

#### Micronesian Islands









Prototype Hotels for Micronesian Islands

The Hodne/Stageberg Partners Inc.

Minneapolis, Minnesota

These are representative of several hotels the firm designed, one for Koror and one for Truk. They were conceived as a design "system" that could be built on a number of Islands in the Micronesia area. The "system" was generally a precast concrete frame, and wood infill panels, with exterior walls and roof cov-

ered with a panel manufactured in New Zealand and not unlike galbestos. Much of the construction was accomplished in New Zealand and barged into the islands (due to a scarcity of local skilled labor). Associates were with Ned B. Wiederholt, Architect, Honolulu.

High-rise Housing Tower Cedar Rapids, Iowa

Miller Melby & Hanson Architects, Inc. Minneapolis, Minnesota

Miller Melby & Hanson and Knutson Construction Company have formed a design/build team to construct this 22-story high-rise housing tower on the east bank of the Cedar River in downtown Cedar Rapids.

The project owner — Del, Inc., of Cedar Rapids — is financing the market rate rental project through the FHA 220 program. The building consists of 24,000 square feet of commercial space combined with tower entry and parking on the ground level. Above are 5-1/2 levels of parking ramp providing space for 208 cars. The point tower plan above provides community space with an outdoor riverview deck on its lowest level. Nineteen floors of housing with 8 units per level of efficiency, 1-BR and 2-BR provides for a total of 152 units.

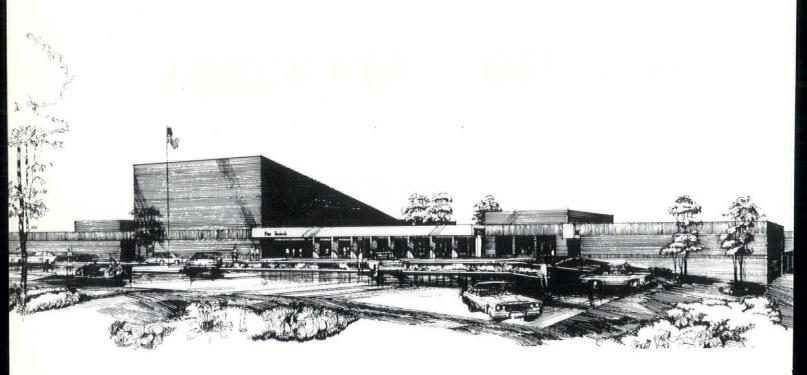
The structure consists of posttensioned column and slab structure with precast panel and glass exterior wall.

The project is anticipated to begin construction in the summer of 1973.

Miller, Melby & Hanson have an unusually extensive practice in this kind of work. Among dozens of projects are those located in many communities of Minnesota, Wisconsin and Iowa, as well as Springfield, Vermont, Old Town, Maine, Shelbyville, and Macomb, Illinois, and Baltimore, Maryland.



#### Nebraska



Jewish Community Center Omaha, Nebraska

**Baker Associates, Inc., Architects** Minneapolis, Minnesota

A 30-acre site accomodates this 104,806-square-foot building which serves the Jewish community's many-faceted activities.

#### North Dakota



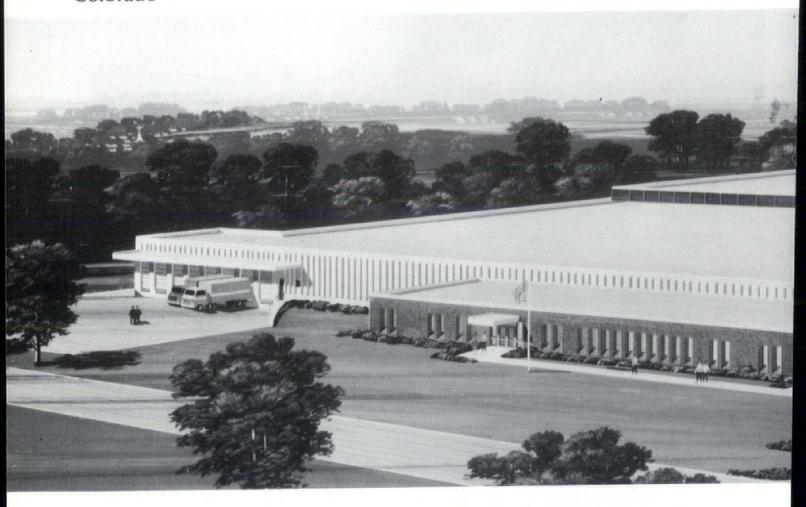
First National Bank Dickinson, North Dakota

Bergstedt Wahlberg Bergquist Associates, Inc. St. Paul, Minnesota This building was to house a fast growing bank in a western North Dakota town of 10,000 on a restricted site in unattractive surroundings. The "old bank" on east 75 feet of property was to stay in business until new complete and a six-year-old parking and drive-in building on west 75 feet of property was to be incorporated.

In the solution customer flow from all directions was collected in a central lobby. Departments were arranged so separate hours could be maintained. Plaza which replaced old bank serves as an area for special promotions and advertising by the bank, area for civic functions, hub of projected downtown redevelopment and an "oasis in arid western Dakotas."

The building is of concrete and masonry for security and feeling of solidity. Because of ugly surroundings glass areas are minimal and open to controlled view as screen walls, plantings and water create the building's own environment. Emphasis is on form and pattern as a contrast to "big sky" and endless prairies.

#### Colorado



Hoerner Waldorf Projects

Bissell, Belair & Green, Inc. Architects Minneapolis, Minnesota Since 1970 the Container Division of Hoerner Waldorf Corporation, St. Paul, has employed Bissell, Belair & Green, Inc., to design and manage construction for several plants and major additions across the United States. States where projects have been and are currently located include Massachusetts, Maryland, Iowa, Missouri and Colorado.

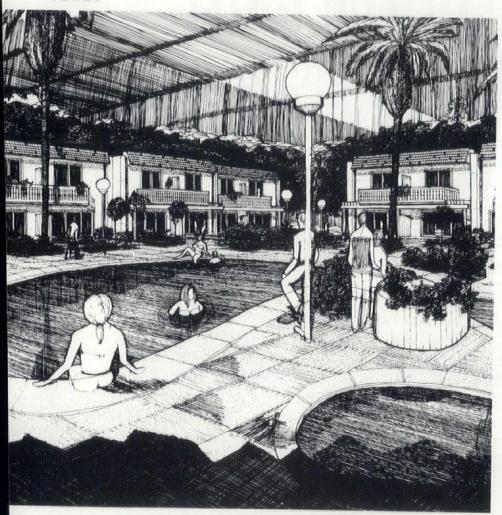
The design of the plants is product flow oriented and hence prototypical. In fact, two identi-

cal plants are presently being enclosed in St. Joseph, Missouri, and Denver, Colorado.

and Denver, Colorado.

One exciting aspect of a broad-based practice is the necessary research into regional industry practices, both in terms of construction technique and construction administration. It gives a rare opportunity to work creatively with extremely diverse approaches to the problem of space enclosure.

Texas



The Villa Condesa Brownsville, Texas

John Ivey Thomas/Thomas A. Vecchi, Inc., Architects
Duluth, Minnesota

The Villa Condesa is a 57-unit condominium townhouse development in Brownsville, Texas, located on the southern tip of that state.

This project is located in a modern residential district on a main street in Brownsville. The site is heavily wooded with tropical palms and southern Live Oaks. Units are two and three bedrooms, all with patios and decks facing toward the inner court, which has a swimming pool. The auto access is around the outside ring of the site with carports on the outside and walled yards with iron gates leading into each unit.

R&O



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.

6045 Pillsbury Ave., Mpls.

Call 861-3377

# glenmar

- Hough Folding Partitions
- Claridge Chalkboards

glenmar company

(612) 888-4101

8850 WENTWORTH AVENUE SOUTH MINNEAPOLIS, MINNESOTA 55420

# Cost efficiency is one of the most important reasons for letting separate contracts

It's been proved over and over again. Both in privately financed construction and in public construction where funds come from taxes. In fact, many states and cities require separate bids. The mechanical portions must be separated from the general construction bids. The result is that competitive bidding for mechanical work reduces costs, increases efficiency. That's reason enough to let all mechanical contracts separately.







PIPING INDUSTRY DEVELOPMENT COUNCIL

OF MINNEAPOLIS AND ST. PAUL

#### **Texas**



General Mills Restaurant Dallas, Texas

Cottle-Herman Architects, Inc. Saint Paul, Minnesota

The architect was asked to design a family-oriented restaurant as a prototype for a nation-wide building program. The site is located on a major traffic artery scheduled for commercial development. Required facilities included a dining room to seat 275, a retail bakery, a food carryout counter, a gift shop and food production areas.

The building program required

a system to allow varying the size of future buildings and to allow the future mass production of the basic structural elements. The client also requested that the architect design a building which would present a progressive image to the public, consistent with a high degree of quality and service.

Similar restaurants have been constructed in Columbus, Ohio, Kansas City, Kansas, and Scottsdale, Arizona.

This project won an MSA awardin 1971; see pages 306-307 of the November-December issue, 1971.

# ARRIGONI BROTHERS COMPANY

TERRAZZO . CERAMIC TILE . MARBLE

Epoxy and Cement Exposed Aggregate Panels cast in place or precast

PREEMA SPECIAL WALL FINISHES

WALKS

DRIVES

PATIOS

CEMENT FLOORS

Founded in 1927

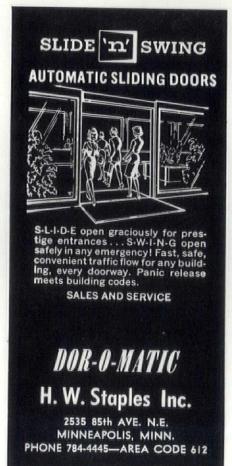




817 Vandalia St.

645-9321

St. Paul





#### Sauk Centre High just made plans for the 1997 class reunion

When the class of 1972 meets for their 25-year reunion in 1997, chances are they'll be running into an old friend — Romany-Spartan® Ceramic Tile.

The planners at Sauk Centre were not only thinking of this year's classes, but classes for years to come. That's why they chose Romany-Spartan tile, a product that's been going to school just about as long as any other surfacing material.

Romany-Spartan tile has earned its Ph.D. (Phenomenal Durability) from school after school over the years. That's one of the reasons why some of today's leading educators and architects continue to specify it. There are many more reasons, too. Like versatility in design, color selection and minimum maintenance costs.

So if you're looking for a material that'll make it back to reunion after reunion still looking as young as the day it entered school,

specify Romany-Spartan ceramic tile.



Tile Contractor: Watson-Hippe, Inc Minneapolis • Architect: Batson and Wegleitner, Minneapolis

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.

#### 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.

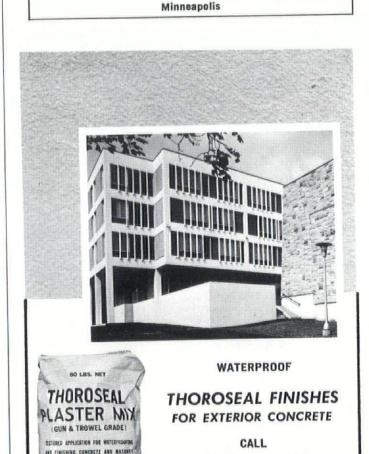
Write or call us for a Cost Estimate.

#### AMERICAN ARTSTONE COMPANY

New Ulm, Minnesota Phone: 507/354-8835

0

ROBERT J. SNOW, Representative Phone: 374 · 1216

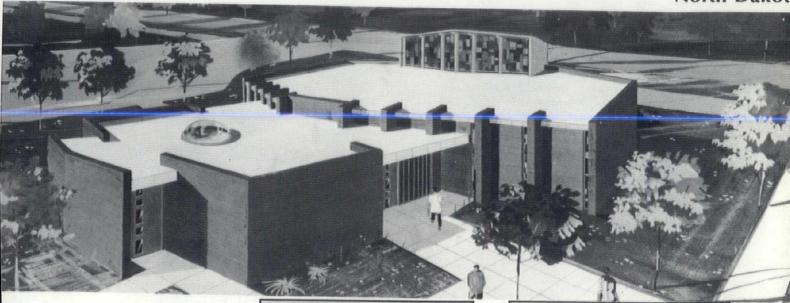


CONPRO, INC.

781-9583

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

#### North Dakota



Church of The Transfiguration Edgeley, North Dakota

G. S. Rutter Associates, Architects Moorhead, Minnesota

This a Catholic church, whose seating capacity is 400 persons. The plan includes the pastor's office, sacristy, large narthex, nave, sanctuary, Eucharistic Shrine and baptismal areas, all placed in the design to assure proper movement of clergy and worshippers with a maximal use of site and area contained.



- \* FOLDING PARTITIONS
- \* CARVED ENTRANCE DOORS
- \* BI-FOLD CLOSET DOORS
- \* WARDROBE AND LINEN SHELVING
- \* SAUNA ROOMS AND EQUIPMENT
- \* WINE VAULTS

MAHIN-WALZ, INC.

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

STORE AND APARTMENT "TOPS"



A NEW LOOK FOR A CHANGING WORLD

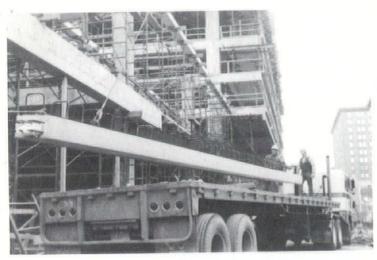
NULOOK CORPORATION 8918 WENTWORTH AVE.

SO.

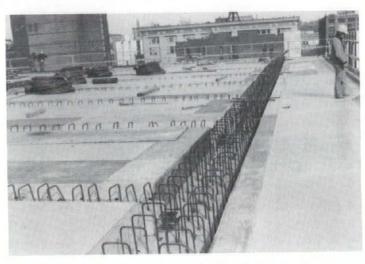
BLOOMINGTON, MINN. 55420 612-881-4515

### THE COMPOSITE BEAM

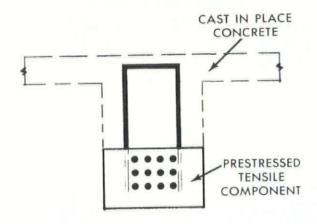
50,000 LINEAR FEET OF PRECAST PRESTRESSED CONCRETE TENSILE COMPONENTS GO INTO THIS PROJECT IN ST. PAUL, MINN.



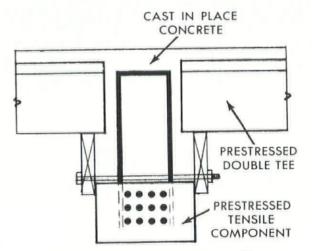
Precast portion of Beam being hoisted on job.



Beams in place, ready for Concrete.



Tensile Component with poured in place floor.



Tensile Component with Double Tee, Composite Topping and Beam Concrete.

CALL US.
COMPOSITE BEAMS MAY FIT
YOUR NEXT JOB.

CONCRETE PRODUCTS COMPANY

Phone: 507/553-3138 WELLS, MINNESOTA 56097



#### COST ESTIMATING AIDS

Reviewed by James A. Kellett

The reviewer, an architect and member of AIA and CSI, is a materials and specifications consultant to several MSA firms.

The time is long past when the "SWAG" method of construction cost estimating was adequate to the architect in managing construction costs through the design phases of his projects.

Sophisticated analysis of costs, from the very earliest stages, has become the rule to such an extent that Minnesota architects now have available several consultants with construction cost catalogs and EDP systems capable of rapid retrieval throughout the entire design process. The large projects demand this expertise and usually a client will serve himself well by authorizing the expenditure of fees for additional services in the cost consulting field, whether accomplished by his architect or by a consultant. Three excellent books exist to provide the architect with the "in-house" capability of reasonably accurate estimates through the use of nationally or regionally based cost catalogs, depending upon his needs. Means Building Construction Cost Data is excellent for the more casual estimator. CPC's Building Cost File provides superior information for detailed cost analysis. The Dodge Manual for Construction Pricing and Scheduling adds productivity data to an excellent repertoire of cost data. The three provide a full range library.

I would recommend the use of any one of the three for specific applications but warn against simultaneous use in any combination. Pick the system that best suits your needs and stick with it, at least through a single project. Adjustment of pricing information should be based on your own superior knowledge of local practice and *not* on shopping your pricing catalogs.

#### **BUILDING CONSTRUCTION COST DATA 1973, 31st Edition**

Robert Snow Means Company, Inc., Publishers, P.O. Box NA, Duxbury, Mass. 02332 \$9.50 Prepaid.

This volume, familiar in architects' offices for so many years, should continue to hold a valued place on the reference shelf. While it is best suited, in this writer's opinion, to the range of estimates between the casual preliminary estimate and the semi-detailed cost analysis, it does provide enough detail for the careful estimate so often necessary in decision making.

The format is good. It is based on the 16-division CSI format and seems to be adequately cross referenced and indexed to make it easy to put together estimates on multi-trade assemblies. While installed costs of typical materials and systems are readily locatable, the minute detail necessary for estimating nonstandard or otherwise unique systems and assemblies is more difficult to find.

Means catalogs its fine series of estimating forms at the rear of the book. These forms, in my experience, work well with the book to provide a very usable estimating system. The book continues to provide an ample section on square foot, cubic foot and percent of total cost for building costs by building type as well as a great deal of explanatory copy, cross referenced to the cost catalog portion.

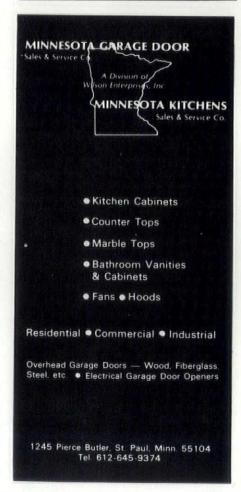
The old cut thumb-tab index, so handy through the 1971 edition, is still absent. However, the bold page-edge visual index

#### Carl W. Fogelberg Co.

#### HEADQUARTERS FOR BUILDING PANELS

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

CALL 646-7306 1595 Selby Ave., St. Paul, Minn. 55104





ELEVATORS, MODERNIZATIONS
OIL, HYDRAULIC PASSENGER &
FREIGHT ELEVATORS

24 HOUR SERVICE — ENGINEERING FREE ESTIMATES

(612) 331-1621

796 291h AVE. S.E., MINNEAPOLIS, MINNESOTA 55414 .

NAAMM

Circular, Spiral,

#### CONVENTIONAL

Industrial, Commercial,

ORNAMENTAL

STAIRWAYS

Fabricated To Architects Owner's Specifications

C. W. OLSON, INC.

1310 QUINCY STREET N.E.

MINNEAPOLIS, MINNESOTA 55413

Phone: (612) 335-1143

used this year is far superior to the broken lines used to simulate a thumb index last year.

The \$9.50 cost is up from last year's version but the document improvements and an approximate expansion of 10% in material still make *Building Construction Cost Data 1973* a real bargain.

#### **BUILDING COST FILE 1973,**

Central Edition Construction Publishing Company, Inc., Publishers, Box NA, Two Park Ave., New York, N.Y. 10016. \$19.95 Prepaid.

The newcomer of published cost information, Building Cost File 1973, is a unique and valuable estimating tool. This volume, prepared by McKee-Berger-Mansueto, Inc., pioneer cost consulting firm, provides minute estimating detail in easy-to-use computer printout form.

The book is well formulated and indexed. Its greatest value would appear to be in its use by the experienced estimator in developing detailed cost analyses for decision making on materials and systems or for the preparation of detailed cost estimates based on completed construction documents.

Like the others, Building Cost File is organized in the 16-division format of the Construction Specifications Institute. One arrangement problem may cause the browsing user to overlook the cost data on site development (civil, plumbing utilities and electrical distribution) and Division 11, Building Equipment, located at the rear of the book. These are important areas where it is often difficult for architects to develop cost data without time consuming discussions with specialty contractors and manufacturers' representatives. To miss this material would be unfortunate.

Building Cost File does not

provide the square foot and cubic foot cost data that other aids include but is is so clearly a detailed costing guide that it attempts no further industry-wide analysis except the geographical adjustment index.

The file is available in four regional editions and special editions and special editions and special services are available. Whereas the adjustment index in the first edition included only cities in the region of publication, this year it includes 72 cities across the country and provides a composite index as well as indices for 24 major construction trades.

Estimating time saved by this book's ease of reference on one project alone can return its \$19.95 cost many times over.

#### DODGE MANUAL FOR BUILD-ING CONSTRUCTION PRICING AND SCHEDULING 1973,

Annual Edition No. 8
Dodge Building Cost Services,
McGraw-Hill Information
Systems Co.,
Box NA, 1221 Avenue of the
Americas, New York, N.Y. 10020.
\$14.95 Prepaid.

McGraw-Hill provides a whole library on construction cost estimating, the Dodge Manual for Building Construction Pricing and Scheduling being only one. This pricing and scheduling manual is also organized around the CSI format and includes such explanatory text and adjustment indices as are necessary to make it a good estimating tool.

The document seems to be oriented a little more to the contractor-estimator because of the inclusion of productivity data by adding, alongside the unit cost data, typical crew sizes and their output. With present day changes in scope of practice, however, there will be more and more firms demanding this type of information in their cost control programs, especially the architect-construction manager

## blueprint

DISTRIBUTORS FOR KEUFFEL & ESSER CO.

Architects and Engineers Supplies Surveying Instruments Blueprinting

612 Third Ave. So. Minneapolis 55402

332-5444

and architect-developer firms. Even in traditional practice, the scheduling columns need not be considered redundant. This reviewer has used previous editions of the manual in checking contractors' schedules of values where labor versus materials costs and schedules are at issue and in reviewing contractors' pricing of change orders or claims for extra compensation where time is an element in the consideration. Also, one can visualize the use of the productivity data in evaluating a contractor's staffing of tight schedule jobs or trades.

As with the other manuals, this Dodge effort appears well

upper midwest area business reports

indexed in an easy-to-use for-

upper corner of each page pro-

vide a quick and direct location

volume are the most detailed of

the three reviewed here. They

include material, labor and total

indices for some 50 trades and

sub-trades in 82 U.S. Cities. This

in itself should allow for exacting

accuracy where it is necessary to

adapt to specific localities.

The adjustment indices in this

of material for specific trade

areas.

placed boldly at the outside

mat. The CSI divisional numbers

## CONTEMPLATED CONSTRUCTION

Get early news of need indicated for new facilities and preselection news of building projects being proposed in our five-state area.

For our Contemplated Construction Report, other Business Reports or a clipping order, contact:

Western Press Services

1022 UPPER MIDWEST BLDG. MINNEAPOLIS, MINN. 55401 (612) 332-8691

#### W. L. Hall Co.

Wausau Aluminum Windows And Curtain Wall

Alenco Double Hung And Sliding Windows

Kesko Thermo Sash Windows

Carda Teak Windows

Coast to Coast Steel Windows

Kalwall Panels and Skylights

**Cupples Aluminum Entrances** 

Hickman Aluminum Fascia And Water Dam System

Foldoor Partitions and Folding Walls

Chemclad Plastic Laminate Doors

Hofco — Custom Enclosures

2816 Dupont Avenue South Minneapolis, Minnesota 827-2839 Coolbroth-Sitton
Septic Tanks, Onc.

ONE PIECE
CONCRETE SEPTIC TANKS

Precast Watertight — Steel Reinforced

Blue prints available

4810-B WEST MEDICINE LAKE DRIVE
MINNEAPOLIS, MINN 55428

PHONE 612 545-2487



#### Peterson Wins Reynolds Regional

William S. Peterson of Columbia Heights, Minn., has been named as a regional winner of the 1973 annual Reynolds Aluminum Prize for Architectural Students at the University of Minnesota.

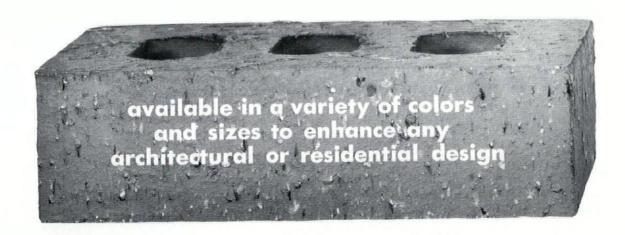
The Student Prize, administered by the AIA, is offered for the "best original architectural design in which creative use of aluminum is an important contributing factor."

Peterson won the student competition at the university with a concept for a housing sys-

tem. The young architect explained that several intermediate design stages exist between the initial efficiency unit and the developed model. As the family size and income grow, more units would be added.

Peterson received a check for \$350 from Reynolds. The design, along with those of winners from other participating schools of architecture in the U.S., will be entered in the national competition for the Reynolds national student architectural prize. The award carries with it \$5,000 to be divided equally between the winning student and his school.

# **CAN-TEX FACE BRICK**



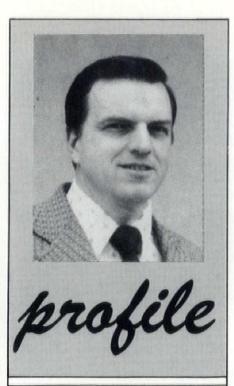


#### BRICK AND TILE DIVISION

DES MOINES

101 Ashworth Road West Des Moines, Iowa 50265 Sales Office (515) 279-9721 Distributor Sales (515) 279-1327 MASON CITY P.O. Box 619 Mason City, Iowa 50401 (515) 423-6264 MINNEAPOLIS - ST. PAUL 268 S. Plaza Bldg.

268 S. Plaza Bldg. Gamble Center Minneapolis, Minn. 55416 (612) 544-3612



As Robert E. Sheppard of U.S. Plywood nears the end of his term as president of the Minnesota-Dakotas Chapter of the Producers' Council, he looks forward to continued service to the PC in its relations with the architectural-construction industry. Past presidents, he said, give of their experience to the executive board, help with member-ship enrollment, serve on the nominating committee and otherwise aid progress of the council.

The chapter recently was rated tops in the country for its satellite program, in which members hold luncheon-seminars complete with individual exhibits and talks on products in cities throughout the area.

Active in the Construction Specifications Institute, he has done a study on specifying architectural hardwood panelling as a member of the CSI committee. This is part of work in which related aspects of specifying are detailed for the use of architects' offices.

Sheppard is also active in the Architectural Woodwork Institute and on the building committee of his church, now handling a million-dollar auditorium addition.



Fountain Woods of Edina — Four Buildings of 80 Units Each 62nd Crosstown at County Road 18 • Edina Darrel A. Farr Development Company, Owner and Builder Reese-Rova Architects
H. Carl Walker & Associates, Consulting Structural Engineers

#### **AVOID CONSTRUCTION FIRES**

This apartment, built entirely of Fabcon solid wall panels and hollow core floor slabs, is not likely to be damaged in a construction fire. Be sure that your building is finished at the right market time.

For information call Dave Hanson, President, H. James McConkey, Director of Engineering, Mike Trebtoske, Director of Marketing, or Gary Janisch, Engineering Assistant.

FAB CON

FABCON, INCORPORATED
700 West Highway 13 • Savage • Minnesota • 66378 • 612-890-4444
Fabricated Concrete Structures Using SPAN-DECK®

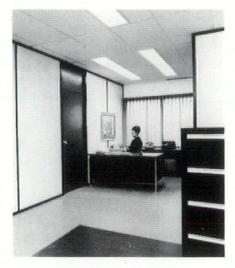
#### **New Products**





#### Upcon Grout Gives Added Compressive Strength

In construction the new Upcon grout is designed to carry the extreme load transfers of steel columns, concrete columns, foundation underpinnings, bearing plates, etc. It also provides a strong, stable base for machinery with vertical, lateral and eccentric thrusts. It does not react with magnesium. Representative is Snow-Larson Co., 204 Humboldt Ave., No., Minneapolis 55405.



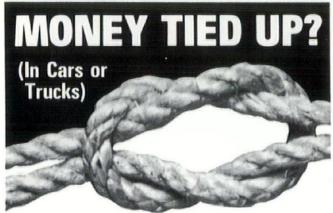
Neal Announces New Space Dividers

A complete range to meet needs of schools and offices in space dividers has been announced by Neal Slate Co. A post-and-panel, low height partition and low-budget gypsum demountable wall are newest in the line. All have the Neal System 2 features. All units in the line are compatible and frame parts can be interchanged. Neal's address is 7975 Wallace Road, Eden Prairie, Minn. 55343.



Sun and Winter Thwarted in IDS Tower

The IDS Tower's 51 stories are sheathed against the inroads of the sun's rays and Minnesota's biting winter by 28,000 panes of silvery hued Vari-Tran reflective coated glass manufactured by Libbey-Owens-Ford Company. In addition to being specially coated, a large portion of the glass is Thermopane. Consequent lighter air conditioning load is in line with today's energy conservation programs.



You can release capital for more productive uses by leasing new cars or trucks from LuMac. Start paying for your transportation as you use it, instead of in advance. "Get the best of the leased from LuMac!"

- Any model of any make —your choice.
- Personal attention from experienced people.
- Competitive rates based on fleet volume.
- Proven experience effecting the most economy, convenience and service.

For a free copy of our booklet of "Straight Answers to Common Questions About Leasing," call or write:

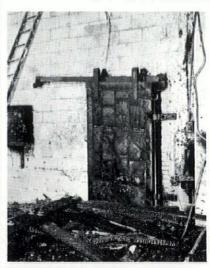


LUMAC LEASING

5760 Wayzata Blvd., Minneapolis, Mn. 55416 Telephone: (Area Code 612) **544-3591** 

# FIRE DOORS

— BY-STREMEL —



Dependable Stremel Tin Clad Fire Doors willsave 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.

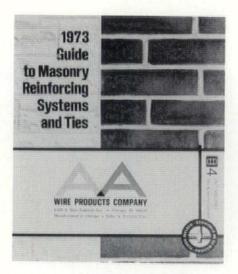
260 Plymouth Ave. No.

Minneapolis, Minnesota 55411



#### Pollution Packer Reports Savings in New System

Re-Use-A-Cubes have been announced by Pollution Packers to offset the high cost of one-time packaging in waste disposal. The heavy duty cube can be used with or without plastic liners and modular design allows for good stacking. All kinds of waste, wet or dry, can be packaged in the new system. Details can be had from The Tony Team, Inc., 7399 Bush Lake Road, Minneapolis, Minn. 55435.



#### New Guide to Masonry Reinforcing and Ties

Detailed for the architect and others in the construction field, a new guide to masonry reinforcing has been published. Illustrations and specifications are given for all types of partitions, walls, corners, intersections and anchorages to steel, wood and masonry. New products are also described. Copies can be obtained from AA Wire Products Co., 6100 So. New England Ave., Chicago, Ill. 60638.



#### Grace Reports New Deck Waterproofing

A new self-adhesive waterproofing membrane engineered for bridge decks, etc., has been reported by W. R. Grace & Co. Listed under the name Heavy-duty Bituthene, it is used to prevent water and chemicals from damaging the deck and supports. It has ability to withstand physical stresses. Details from Grace's Construction Products Div., 62 Whittemore Ave., Cambridge, Mass. 02140.

#### **PROGRESS**

through TESTING

TWIN CITY TESTING AND ENGINEERING LABORATORY, INC.



Physical, environmental and performance testing (including non-destructive, metalurgical, construction materials, soil mechanics, chemical analysis and investigations) in well-equipped laboratories. Field work expedited using mobile vans and field laboratories. Inspection, product development, quality assurance procedures, special investigations and court testimony.

#### TWIN CITY TESTING AND ENGINEERING LABORATORY, INC.

662 Cromwell Ave., St. Paul, Minn. 55114 Tel. 645-3601

DULUTH, MINN.
Lakehead Testing
Laboratory, Inc.
226 No. Central Ave.
628-2295
ROCHESTER,
MINN.
609 6th Ave. N.W.
288-7060
SIOUX FALLS, S.D.
4909 N. Cliff Ave.
332-5371
WATERLOO, IA.
529 Logan Ave.

BISMARCK, N.D. 1906 East Broadway 223-6149 FARGO, N.D. 2105 7th Ave. N. 235-4256 GRAND FORKS, N.D. 2003 Gateway Drive 775-3168 MINOT, N.D. Hgwy. 83 S at Harrison Ave. 838-6674

LA CROSSE, WIS. 214 Cass Street 782-6110

#### SNOW-LARSON

Construction Materials



A non-ferrous non-shrink cementitious construction and machinery grout and patching compound.

> USM Corporation Upco Chemical Division

204 Humboldt Ave. No. Minneapolis, Minn. 55405 612/374-1216

232-6591

#### **Professional Printing Service**

OFFER TO ARCHITECTS AND ENGINEERS

IN THIS 5 STATE AREA

DISCOUNT RATES

FAST SERVICE

OFFSET PRINTING
SPECIFICATION BOOKS
TECHNICAL MANUALS
PROMOTION BROCHURES

#### MIDWESTERN PRINTING

2070 DOROTHY AVENUE WHITE BEAR LAKE, MINN. 55110

429-9594

426-2583

#### **Index to Advertisers**

American Artstone Co 126	Mir
Arrigoni Co	В
Blumberg Co	Mir
Business Furniture, Inc 110	Nas
Cantex Industries 132	No
Carney & Associates 98	Nu-
Child, Rollin B	Ols
Conpro, Inc	Oth
Coolbroth-Sitton Co	T
Dor-O-Matic	Ove
Drake Marble Co 106	Pre
Edwards Sales Co 104	R &
Fab-Con Inc	R &
Fogelberg, Carl 129	Shi
Glenmar-Hutchinson Co 123	Sno
Grazzini Bros. Co	Soi
Hall Co., W.L 131	Ste
Lumac Leasing	Stre
Mahin-Walz Co	Tor
Midel Co	Twi
Midwestern Printing Co 136	Vin
Minneapolis-St. Paul Piping	We
Council 124	P
Minnesota Blue Print 131	We
Minnesota Ceramic Tile Ind 108	WL
Minnesota Garage Doors 129	

Minnesota State Conference of
Bricklayers and Masons 111
Minnesota Tile Supply Co 136
Nasby, Chas. S 99
Northern Natural Gas Co 109
Nu-Look Co
Olson Inc., C. W
Other Telephone Co.,
The Cover IV
Overhead Door Co 100
Prestressed Concrete Co Cover II
R & O Elevator Co
R & R Industries
Shiph Ca LL Cover L
Shiely Co., J. L Cover I
Snow-Larson 13
Soil Engineering Services 9
Stewart Lumber Co 10
Stremel Bros
Toro Manufacturing Co 10
Twin City Testing & Engineering 13
Vincent Brass & Aluminum Co 10
Wells Prestressed Concrete
Products 12
Western Press Clipping Service 13
Wunder-Klein Donohue Co 10
The state of the s

# STRUCTURAL STONE WARE, INTRESTADO TILE

WENCZEL TILE
KATELO CERAMICS
TEC ADHESIVES

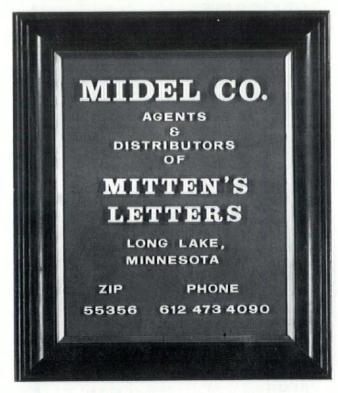


Minnesota Tile Supply

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

WHEN YOU THINK OF TILE





# Taking Thought with Prestressed Concrete



The Pyramids of Egypt stand today as a monument to man's creative thinking. The type of imagination which brought mortar and stone together to capture the history of an ancient civilization.

Today's Prestressed Concrete structures capture man's creative thinking in our fast-moving, modern civilization. Such is the case with Saint Luke's Hospital Parking Ramp—a structure built of Prestressed Concrete, designed to accommodate 400 automobiles. This structure is compact, yet has over 144,470 square feet in five levels. Total building costs for each car space is \$2,250.00 which includes special foundation work—a fact made possible only by Prestressed Concrete, Inc.

The structure consists of 97,000 square feet of 26-inch deep untopped double tees (tees have 4-inch thick by 8-feet wide top flange and span 54 feet 4 inches). There are 24,000 square feet of 12-inch deep by 7 feet 8 inches wide load-bearing double-tee wall panels (panels are spaced 8 feet on center and are a variable length up to 43 feet 8½ inches maximum height).

There are four levels consisting of 3 bays of sloping ramps with 2,200 linial feet of interior Prestressed beams on 24 foot column spacing. Over 400 precast pieces were fabricated at Prestressed Concrete's plant independent of high-priced, on-site construction cost factors. The completed ramp is both functional and pleasing—a fine compliment to the adjoining clinic and main hospital structure.

PROJECT: St. Luke's Hospital Parking Ramp St. Paul, Minnesota

ARCHITECT: Ellerbe, Minneapolis, Minnesota

CONTRACTOR: Adolfson & Peterson, Inc.
Minneapolis, Minnesota

The Thoughtful Designer will specify:





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

The 1968
Declaration of Independence for architects.

In 1968, the courts declared that business, lawyers, schools, hospitals and clinics, and institutions could own their own phones. No more bondage to Bell.

That means that you can save your clients a lot of money. Because owning a phone system costs a lot less than renting one from Bell. Monthly payments are less. There are tax advantages. And, of course, the end result is a tangible asset instead of a bale-full of worthless phone rental bill receipts.

Your client will like that. Your client will also appreciate that you can specify a phone system that's just right for his needs. Instead of settling for what Mother Bell says you can have, now you can choose.

The OTC people have over a century of service with Bell. We know phones. We know communications. And now we're with The Other Telephone Company because here we have freedom to choose equipment that's right for the job... the best equipment made by ITT, Northern Telecom, Stromberg-Carlson, Voycall and many more famous names in communications. We start where Bell leaves off.

And take care of every system we install... No red tape... no waiting for maintenance. You just ask any of the more than one hundred and fifty owners of a TOTC system. They'll tell you.

One more thing: as an architect, you get your commission on the entire phone system when you specify TOTC. That's a lot of extra money...just for rendering your client a little extra service.

Make us prove it.

The Other Telephone Company

941-6622. We start where Bell leaves off.

