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BULLETIN

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Next Month — GLASS
The second of a series of articles on Building Technology.

Eshbach to Receive Kemper Award
William W. Eshbach, FAIA of Philadelphia, Pa., has been named the recipient of the American Institute of Architects' 1966 Edward C. Kemper Award for his "significant contribution to the Institute and to the profession of architecture."

The award, voted by the AIA Board of Directors, will be presented at the national convention in Denver, June 26-July 1. It is given in memory of the late Edward C. Kemper, who was executive director of the Institute from 1914 to 1948.

Eshbach is a partner in the firm of Eshbach - Pullinger - Stevens & Bruder, of Philadelphia, winner of several design awards. A corporate member of AIA since 1955, he was elected to the College of Fellows in 1964. This lifetime honor was bestowed for design and service to the profession.

The award winner has been active in Institute affairs at every level. He served as a director of the Pennsylvania Chapter, as president of the Pennsylvania Society of Architects and as director of the Pennsylvania Region, prior to being elected to the office of national vice president for the 1964-65 year.

Eshbach has also served on several national committees. He has been chairman of the Committee on Committees (now Council of Commissioners), of the Commission on Professional Practice, of a board committee to develop the program for the 1963 convention, of the Documents Review Committee, of a board committee to develop a model "Statute of Limitations" act for use by state societies or chapters, and of a board study of the idea of AIA-Affiliated Councils.

Eshbach is currently chairman of the Institute's Nominating Committee, and he heads the Pennsylvania Society of Architects' committee developing an "Advance Planning Services Concept" for the state government.

Reynold Prize to LIT Senior
Gerald Yurk, 25 year old senior of the Lawrence Institute of Technology, is the winner of the 1966 sixth annual regional Reynolds Aluminum Prize for Architectural Students.

A graduate of Flint Northern High in 1959, he is the son of Mr. and Mrs. John C. Yurk, Flint.

The presentation of a $200 check was made by Ray R. Shevchik, regional architect specialist for Reynolds Metals Company, Southfield. Also participating was Dr. Earl Pellerin, director of the LIT School of Architecture.

Gerald Yurk

The student prize, administered by the American Institute of Architects, is offered for the "best original design of a building component in aluminum."

Yurk's design was "A Three Dimensional Fenestration System."

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MAP 7th Annual Congress
The 7th Annual Congress of the professions, sponsored by the Michigan Association of the Professions, will be held in Detroit Saturday and Sunday, May 14-15, 1966, with the Pontchartrain Hotel as headquarters for the meeting.

As in previous years the Congress will attract many of the key professional people in the state as well as representatives of professional organizations from approximately 30 states.

The meeting is open to all members of the professions represented in MAP. These new include: architecture, certified public accounting, dentistry, education, engineering, law, medicine, pharmacy and veterinary medicine. Delegates from the state and local organizations of the professions will be sent to the weekend session.

"The World of the Professional" is the theme for the 1966 Congress. Outstanding world-famous speakers are being invited to bring news of key importance to the individual professional man. Of equal importance is the opportunity this Congress provides for the leading professional people of Michigan in these major professional groups to meet in an atmosphere of cultural interest and professional harmony.

President of MAP, architect Adrian N. Langius, comments: "This Congress will have everything rolled up in one. A unique weekend; professionally conceived, professionally executed and professionally worthwhile."

King & Lewis Appoint Engineer
Harry S. King, President of King & Lewis Architects and Engineers, Inc., announces the appointment of Robert S. Tarske as Director of Engineering.

Tarske is a graduate engineer and attended Detroit Institute of Technology and University of Alabama, is a member of American Society of Refrigeration and Air-Conditioning Engineers and is a registered Professional Engineer in the States of Michigan and Massachusetts.

Tarske's responsibilities will encompass the design of all mechanical and electrical facilities for the firm.

A/E Liaison Commission Meets
Publication of a joint document on "Professional Collaboration in Environmental Design" was approved by the Architect-Engineer Liaison Commission at its recent meeting in Washington. The document, which will be jointly published, outlines principles of professional relationship between architects, engineers and landscape architects. In addition to the American Institute of Architects, the National Society of Professional Engineers and the Consulting Engineers Council, which compose the commission, the
document has been approved by the American Society of Civil Engineers and the American Society of Landscape Architects.

F. Spencer Roach, AIA was elected chairman to succeed George S. Rawlins NSPE; Harold King CEC was named as vice chairman.

The commission also reviewed and approved the Construction Industry Arbitration Rules, establishing a procedure for arbitration of disputes in the construction industry, to be administered by the American Arbitration Association.

Members of the commission expressed serious concern that present educational methods are not producing a sufficient number of qualified persons to perform professional services in building design, and adopted a resolution requesting that the current AIA study of architectural education include the related interests of other design professions concerned with building construction.

Discussion also centered about architectural and engineering fees, and it was resolved that AIA be requested to conduct its pending study of architectural design costs in collaboration with NSPE and CEC in order to make the results as broadly significant as possible for both architectural and engineering aspects of the fee structure.

**Reno Appointed To Flint Firm**

MacKenzie, Knuth & Klein, Architects, Inc., Flint, announce the appointment of Ronald Reno, AIA, as an associate principal member of their firm effective January 1, 1966.

Reno attended Flint Technical High School and served with the U.S. Marine Corps, 2nd Marine Air Wing.

**Reno Appointed To Flint Firm**

Upon his return from military duty he attended Flint Junior College and received his architectural degree from the College of Architecture and Design at the University of Michigan in 1958.

He joined MacKenzie, Knuth and Klein in 1958 and currently is a project architect. He received his registration in the State of Michigan in October of 1965 and is a member of the Flint Area Chapter, American Institute of Architects and the Michigan Society of Architects.

**Conditioned Environment Conference Scheduled**

A conference is scheduled for the University of Michigan, May 3-4, for architects and consulting engineers. It will cover the newest ideas on design concepts for the control of environment electrically in commercial and industrial buildings.

Opening with a luncheon at the Michigan League on Tuesday, May 3, the program will run through the afternoon of May 4 at Rackham Auditorium. A hospitality hour and banquet at the Washtenaw Country Club will feature Judge D. Vokes as speaker the evening of May 3.

This conference is sponsored by the University of Michigan School of Architecture and Design, the Michigan Society of Architects and the Michigan Electric Association.

The University of Michigan Extension Service will be arranging for housing and transportation to and from the banquet. There will be a modest registration charge.

The Adult Education Service Department, University of Michigan-Ann Arbor will handle all arrangements.

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HEC&S Begin Classroom Building

Construction has begun on the new $5,450,000 "Classroom and Office Building" at Michigan State University. Designed by Harley, Ellington, Cowin and Stirton, Inc., Architects and Engineers, the 219,432 square foot building, actually a complex, will include a seven-story office building, a one-story Lecture Hall section and a three-story Classroom building servicing the M.S.U. Mathematics and Language Departments.

The first four floors of the office Building will be devoted to the Mathematics and Statistics Departments, with the top three being assigned to the Foreign Language Departments. In all, the seven-story portion of the building will include some 280-10 by 12 foot faculty office units, seminar rooms, conference rooms and library.

The one-story Lecture Hall section is designed to accommodate 1,470 students, the Lecture Area will have a 600-student, sloped floor Lecture Hall, two similarly designed 20-student Lecture Halls, and one to accommodate 150 students. A 200-student Language Laboratory with fixed booths and a two-level central control room also will be included in this section.

The three-story Classroom Section will include a total of 49 classrooms with a total capacity for 1,718 students. Twelve classrooms are equipped with wall control panels and speakers enabling the instructor to start or stop tapes in the Lower Central Control Room of the Language Laboratory. Twenty-five classrooms have conduit and provisions for speakers for sound from audio-visual equipment.

Contractors for the building are: Building work—Miller Davis Company; mechanical work—Robert Carter Corporation; electrical—Hall Electric Company and elevators—Westinghouse Electric. Scheduled completion date is Spring 1967.

School Modernization Book

"New Life for Old Schools", a 100-page report on solutions to the problems associated with modernization of outmoded school plants, is now in its second printing, sponsored by The Research Council of the Great Cities Program for School Improvement.

The book includes examples of good modernization practices, statements on programs and procedures from each of the Great Cities, discussions of the problem by architects, contractors and engineers, a modernization bibliography and other illustrations and statements on the subject. The book was edited by Ben E. Graves, who is the project director of the school modernization study under a grant from the Educational Facilities Laboratories.

The purpose of the Research Council is to conduct studies of unique problems faced by the Great Cities in their efforts to meet the comprehensive public school needs of their children. Member cities are: Baltimore, Boston, Buffalo, Chicago, Cleveland, Detroit, Houston, Los Angeles, Milwaukee, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco and Washington, D.C.

Single copies of "New Life for Old Schools" are available at $2.50 each from The Research Council of the Great Cities Program for School Improvement, 5400 North St. Louis Avenue, Chicago, Illinois 60625.

New Engineering Group Formed

The Society of County Engineers of Wayne County (SCE) has announced its organization. Membership is restricted to employees of the County of Wayne who are: 1) graduates of an accredited college of engineering or architecture or 2) are registered under the provisions of the Registration Act for Architects, Professional Engineers and Land Surveyors of the State of Michigan.

The SCE has as its objectives: a. The advancement of the sciences of engineering and their application. b. The dissemination of information pertaining to Engineering and related activities. c. To contribute to the development and betterment of the com-

Prestressed Concrete

built a better place to do business

Four different forms of American prestressed and precast concrete structural components were used in this striking store building. These included twin tee flooring, supporting columns and exterior aggregate surfaced fascia panels and canopies.

Here is another interesting example of how prestressed and precast concrete members can contribute both beauty and utility to a commercial structure. Other plus advantages include: fire resistance, durability, ease of construction, spaciousness, design flexibility and low maintenance costs.

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Subsidiary of DeClerk Industries
6419 E. 10 Mile Rd., Centerline, Mich. • Slocum 7-3815
To architect Terence O'Toole
Hats off for ceramics in schools
He armors the halls,
Floors, ceilings and walls
With ceramic tile, cool, man, but cool.
GLF&EA Award Palmer and Saulter Awards

At a recent meeting of the Board of Directors of the Great Lakes Fabricators and Erectors Association, recognition was extended to Robert C. Palmer, President of the R. C. Mahon Company, for his outstanding service to the steel industry during the two years he served as President of the American Institute of Steel Construction, Inc.

At the same meeting, the board also presented a plaque to Nathaniel O. Saulter, President of Acorn Iron Works, Inc. in grateful recognition for his leadership as President of the Association during the years of 1964 and 1965.

Saginaw Firm Appoints P.E.

The firm of Spence and Smith, Architects in Saginaw announces the appointment of Donald G. Bennett, P.E., to the position of construction supervisor and field inspector for all projects in the construction phase.

Bennett is a registered Professional Engineer in the State of Michigan and was most recently employed by the Michigan Department of Health as a hospital consulting engineer for the previous three and one-half years. Prior to this, he held various positions in the construction field with the E. J. Benes Company, Cleveland; Mississippi Valley Structural Steel Corporation; Clark Construction Company, Lansing; and the General Motors Corporation.

Civic Center Competition

A $25 million civic center, consisting of a 17,000-seat arena, a 3,000-seat concert hall and a theater seating 1,000 will be completed in Birmingham, Alabama in 1970. Financed by taxes already in effect, the civic center project will be constructed and operated by the Civic Center Authority of the Cities and County of Jefferson County, Alabama.

Architect for the project will be selected by an A.I.A. approved national competition. Formal announcement of the competitions will be made in about four months.

This is DuLITE... with exceptional insulating value

There are a number of good reasons for selecting DuLite for a roof system. Exceptional insulating value is but one. It has a .75 noise reduction value . . . 2-hour U.L. rating for fire resistive, money-saving construction . . . permanence . . . resistance to moisture and deterioration . . . greater maintenance economy. There's more to tell. Write for catalog.
Exposed concrete surfaces add dramatic beauty to Pontiac's newest school system building

This Administration Building for the City of Pontiac school system came from the design boards of Eberle M. Smith Associates, Inc., of Detroit. A. N. Hickson, Inc., of Detroit, was general contractor.

One of the finest additions to Michigan's educational plant is the new Administration Building for the Pontiac public school system. The architect, Eberle M. Smith Associates, Inc., provided a distinctive and attractive structure by leaving the concrete frame exposed, added special interest with a precast concrete grid. The effective design resulted in both charm and economy.

More and more architects are finding that versatile concrete offers unrivaled opportunities for imaginative design to complement its advantages in economy, durability and low maintenance cost.
WHAT IS THE ROLE OF THE ARCHITECT IN THE WAR ON UGLINESS?

This seemed to be the ever persistent question at the 52nd Annual Convention of the MSA devoted to "The War on Ugliness—No Time For Delay". Some participants in the Convention were outspoken in their dislike of the military jargon which has been adopted by the AIA, and the implications this has as it relates to the role of the architect. The words “war” and “ugly” would seem to fit together yet wars are destructive and while we might wish to destroy what we dislike we have been slow to present images of the changed environment.

Ugliness can be physical, moral or social. A definition of ugliness? One was proposed at the Convention. "Ugliness is the difference between what exists and the potential for what might exist." Ugliness only exists when we can see the potential for something better. As architects this is our responsibility.

It was also suggested that architects have three roles to play:

the architect as citizen
the architect as architect
the architect as a member of an interest group

Most architects perform well in the first two roles and shed the third. Yet the problems we are so fond of talking about are too big to be tackled by individuals. Individual visions are not enough. The MSA could act as a positive lobby for the potential that does exist. It could create an image of what might be.

The California Council of the AIA adopted a Special Committee On Problems Of Environment (SCOPE) in 1964. The committee was given the following assignment: "1. To take inventory of all existing organizations now active with some facet of our total problem of environment.
2. To prepare a roster of individuals at the leadership level of each of said organizations, as well as a summary of purpose and interest of each group.
3. To prepare a roster of individuals not identified with the listed leadership of the above listed organizations, but who could and should be helpful to our common cause.
4. To determine what new, if any, organizations should be created to cover facets of the total problem now lacking attention.
To develop a possible structure for a state wide citizens action group who would combine the efforts to increase the accomplishments of the many groups and individuals now concerned about a beautiful and orderly environment."

The New York Chapter AIA has adopted a special study entitled "Planning and Community Appearance". The first principle of the document reads . . .

"Whatever may have been the case in other times and places, in our modern American culture, beautiful communities can be created and maintained only through a deliberate search for beauty on the part of the community leadership and the designers of environment, backed by a lively appreciation of the visual world by the people."

As architects we can define specific problems confronting the physical environment. We can suggest alternatives to the way things are. We can provide community and state wide leadership with positive visions and stimulate positive actions.
The jury for this year's awards consisted of four prominent St. Louis architects, Robert Elkington, AIA; George Hagee, AIA; Kenneth Wischmeyer, FAIA and Joseph Murphy, FAIA. The large number of awards (12) represents the juries praise for the large quantity and high quality of the submissions this year. In order to give proper recognition to the award winners we will publish the winning entries throughout the succeeding months. The juries somewhat ubiquitous remarks are included.

FIRST HONOR AWARD

SCIENCE AND TECHNOLOGY LABORATORY
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN
SMITH, HINCHMAN & GRYLLS ASSOCIATES, INC.
Detroit, Michigan
Architects and Engineers
SPENCE BROTHERS
Saginaw, Michigan
General Contractor
JOHNSON, JOHNSON & ROY, INC.
Ann Arbor, Michigan
Landscape Architects

Jury Comment: "Considering the scope of the program this is a handsome solution. The grouping and massing of the buildings in relation to the site is excellent."
FIRST HONOR AWARD

FRATERNITY RESIDENCE
ALPHA OF MICHIGAN OF SIGMA PHI CORPORATION
ANN ARBOR, MICHIGAN

DAVID W. OSLER
Ann Arbor, Michigan
Architect

KENNETH D. DAVIDSON
Ann Arbor, Michigan
General Contractor

Jury Comment: "Pleasant treatment, restrained and careful execution of a good plan. Good character in relationship of plan elements."

April, 1966 | 13
AWARD OF MERIT

MANUFACTURING, LABORATORY AND OFFICE BUILDING
AVON PRODUCTS, INC.
SPRINGDALE, OHIO
SOL KING, ARCHITECT
AND ALBERT KAHN ASSOCIATED ARCHITECTS AND ENGINEERS, INC.
Detroit, Michigan
Associated Architects

Jury Comment: "A carefully worked out plan for an industrial building taking into consideration the element of natural light. It is arranged to give interest to the overall facade. Consistent use of materials produces an orderly appearance. The site development is interesting."
HONORABLE MENTION

SWAINSON-WHITEHEAD VACATION HOUSE MANISTEE, MICHIGAN MEATHE, KESSLER AND ASSOCIATES, INC. Grosse Pointe, Michigan Architects WESTON H. SCHUELKE General Contractor

Jury Comment: "A fresh and unique design, incorporating sympathetic use of materials in a natural setting. It is a comfortable plan expressing seasonable use."

photo: Balthazar Korab
The use of concrete as a finish material, though historically quite old, has recently gained the increased interest of architects in the Michigan area. The use of exposed concrete as a design element calls for great care in detailing, specifications and construction procedure. So that misunderstandings will not occur when an architect has specified exposed concrete he must know the variables with which he is working and the special requirements demanded of concrete left exposed.

New Concrete Specifications Guide for Michigan

The need for a more direct approach to the specification of concrete for architectural use in Michigan became apparent several years ago. The vast amount of unrelated information which is available to the architect, and the special mix designs offered by concrete producers, has made the development of good concrete specifications difficult. Many concrete specifications relate to strength requirements, without giving proper attention to the equally important aspects of durability, watertightness, appearance, workability, shrinkage, and other related design factors. The emphasis on strength alone in concrete mix designs is the cause of frequent omissions in specifications.

A recent publication of the concrete industry is helping to clarify the information which is available to Michigan architects and engineers who specify concrete for construction in this state. The new publication Michigan Suggested Standard Concrete Specifications for Buildings and Structures provides a new and hitherto unavailable compilation of structural concrete design standards for Michigan use. The publication resulted from an extensive study of the many codes which currently govern concrete design.

Two years of cooperative effort were put into the research and publication of the specifications by the Portland Cement Association, Michigan Ready Mixed Concrete Association, Transit Mix Institute of Metropolitan Detroit, Michigan Sand and Gravel Association, the Edward C. Levy Company, and a number of individuals who contributed their experience and knowledge to the guide. The new specifications are being distributed through the Portland Cement Association. The PCA will also provide specific instructions in the use of the specifications which are intended to aid the architect, contractor and producer.

The new standards establish a more rational approach to structural concrete specification and are prepared from the standpoint of the architect’s or engineer’s total needs. This more comprehensive approach does not minimize strength requirements but merely upgrades other equally essential factors as related to the ultimate structural concept.

The new suggested standards have two objectives. The first is to provide recommendations which the architect and engineer can confidently accept, eliminating confusion in the specification of concrete. The second is to establish standards of performance which will result in fewer special mix designs, enabling the concrete producer to exercise better and closer control over his product.

While the new suggested specifications do not cover all
FINISHING CAST-IN-PLACE CONCRETE

There has been a steady increase in the use of exposed cast-in-place concrete in the Michigan region. If concrete is to be used in this manner greater care must be taken in the specification of materials and construction procedure. The increased use of architectural concrete has not resulted from any single breakthrough in technology but is a result of belated recognition of the aesthetic and economic advantages that can be obtained through the use of proper design and erection procedures. The little information that does exist in the use of exposed concrete is based on empirical knowledge. While many architectural offices have carried on their own research, a comprehensive and coordinated scientific research program in this area is noticeably missing. It therefore becomes imperative for each architect using exposed concrete to develop his own field testing system for maintaining control over the appearance of his work. The general appearance of concrete is governed by its color and texture. Following are specific problems of control which relate to these two properties.

Color

There are a number of factors which can effect the color or discoloration of cast-in-place concrete.

1. **Cement Color.** Of the three constituent ingredients of concrete, cement, aggregate and water, cement generally is the strongest determinant of color. A comparison of commercially available cements reveals a considerable range of color and tone, running from warm light tan to cold dark gray. For color control, it is imperative that the cement used has been produced in the same mill from the same materials under identical manufacturing conditions.

2. **Cement Quantity and Water/Cement Ratio.** The richness of a mix can greatly effect color. Rich mixes tend to be darker than lean mixes. The water/cement ratio is also an important variable with a high water/cement ratio concrete being lighter in color than a low water/cement ratio concrete. The usual measure of the water/cement ratio is the slump test. Careful control of the mix and well supervised slump testing will help produce a uniform color. The importance of field control should be obvious. Moisture absorbed by formwork can also reduce the water/cement ratio causing a darker coloration at the point of absorption. In the use of wooden forms, lumber species, moisture content, surface treatment with oil and sealers, and the amount of previous use can all effect the absorption characteristics of the form. Leakage at non-watertight joints will also cause a change in the water/cement ratio usually leading to a dark blemish where leakage has occurred.

3. **Finish.** Exposure of the aggregate is perhaps the most common device for affecting surface color. Only a thin film of cement needs to be removed to expose the color of the fine aggregate. Large aggregate when it is exposed may have a color quite different from the small aggregate and cement. The amount of aggregate exposed can thus greatly affect the color as well as the texture of the surface. Sandblasting tends to dull the color of exposed aggregate, while bush hammering which fractures the aggregate, exposes a clear color to view.

Texture

Concrete lends itself to a wide variety of textural possibilities and these can be created at various stages of construction.

1. **Formwork.** The material, configuration, and construction of the formwork can all affect the texture of the concrete surface. Common forming materials, plywood, wood boards, steel, fiberglass, plastics, all create different textures. Imperfections such as nail heads, dents and bulges will also become a part of the textural pattern. Joints and form ties also create very strong patterns. With the exception of slip forming, every forming technique produces a joint. Most attempts to conceal joints are unsuccessful unless the surface is grouted or bush hammered. Construction joints or pour joints are usually equally noticeable. It is good practice to provide reveals or positive breaks at intervals so that pours can be handled in reasonable amounts. To compensate for shrinkage, thermal effect and differential settlement control joints are used. Careful consideration before construction can help in establishing joints which can act as both control joints and construction joints. Forms are held together by ties which are usually placed at regular intervals two to three feet apart. If specified before construction, the location and placement of form ties can be accurately controlled. Ties leave holes from 1/4 in. to 1 1/4 ins. in diameter and from 1/2 ins. to 2 ins. deep. The pattern may be exploited by using a pre-formed plug, tooling a circular reveal at the tie or partially filling the hole to leave a slight circular depression. The placement of the ties is as much an architectural consideration as it is a technical consideration when concrete is left exposed.

2. **Surface Treatment.** Sandblasting and bush hammering are the most common mechanical devices for affecting surface texture. The degree of hardness of the concrete will affect the results of both methods. Sandblasting will give different results dependent upon the size of the abrasive, the size and shape of the nozzle and the pressure propelling the abrasive. Bush hammering will vary with the size and shape of the cutting head, the length of impact stroke and the direction and motion of the stroke. Chemical retardants are sometimes used on formwork to prevent the setting of surface cement, allowing this to be washed away to expose the aggregate.

Because of the many variables involved in cast-in-place concrete the architect must become expert in the small details of construction procedures. The architect must specify the special requirements needed for his work and must be willing to educate the contractor to the degree of quality.
control desired and to the detailed construction techniques necessary to obtain the desired finish. It is also sometimes necessary to be responsive to the special limitations of the contractor or producer involved in the construction. In any case, it is desirable to produce a test panel so everyone concerned has an understanding of the result desired. This must be followed by careful field supervision by both the architect and the contractor. A successful job can only be accomplished with a well coordinated effort between the architect, contractor and supplier throughout the design and construction of the project.

GUIDELINES FOR THE USE OF PRECAST CONCRETE

The precast industry has been growing rapidly in the Michigan area. The number of standard sections which are available have been increased and a wide range of precast and prestressed sections are available. Double tees, single tees, deck, beam column and channel sections have all become standardized items. The methods used to manufacture these sections vary a great deal depending upon the producer. In specifying these sections the architect must clearly specify those producers who manufacture sections with an acceptable performance. The cost can also vary widely among producers, depending upon the size and location of the project and the work load of the producer. An exciting potential of precast concrete is the creation of special sections.

Forms

Forming is usually built using wood, plastics, steel or fiberglass. The form can be a highly crafted item and may be constructed to a tolerance of 3/32 of an inch for a ten foot length. The economics of precasting become attractive only with reuse of the form. An average of 50 to 70 casts can be provided from a single form. When more casts are called for, inexpensive plastic molds can be made from the original positive pattern and the cost of form making is reduced. Savings in repetitive form work can quickly be lost if special sections must be made to fit non-repetitive conditions. These special conditions may sometimes be solved by the use of other materials, development of a more complete initial section, or field pours which eliminate costly form work.

Size

Size limitations are established by weight and transportation limitations. The maximum weight of panel which can be handled at the precast yard or on the site is currently about twenty tons, but with the rapid sophistication of hoisting equipment this limit might quickly be exceeded. Trucking and road regulations limit the dimensions. Sizes over 9' x 10' are possible to transport but will most likely require handling during special hours and also require an escort—expensive penalties. There is however compensation for keeping panel sizes as large as possible, for joints, handling, and connections can all be reduced by using large size units.

Finish

Hand finishing processes are expensive, but utilization of the form work to achieve the desired textures can produce great savings in cost. Aggregate is often chosen for its ability to develop a particular texture or color, however, the use of local aggregate can bring very decided savings in material cost. Precast samples are usually deceiving when viewed from only a few feet away and it should be noted the finish often appears very different viewed from a distance when it is subjected to the uncertainties of light and weather. At a distance, subtle textures or colors are often lost and exotic aggregates purchased to gain special effects achieve negligible results.

Procedure

Precasting is a specialized industry and should be recognized as such. There are few standards in precast work but each manufacturer and producer has developed methods...
upon which he can depend. As our building technology becomes more and more specialized it is increasingly difficult to separate the design and construction processes. A recent example is the development of inserts for precast work which will receive neoprene glazing strips. This detail saves both time and material and contributes to a better articulated and more weathertight joint. Many construction decisions, if made a part of the initial design concept, can create major savings and a simplified design.

RESEARCH

The need for research in various areas of the concrete industry has already been cited in this article. There are however certain obvious limitations to research the concrete industry can provide within its own field. A grant has recently been awarded to the University of Michigan by the Michigan Department of Economic Expansion to study the feasibility of a pre-cast concrete system which would integrate mechanical and lighting services as a part of the structural component.

The project, which is being directed by Professor Bruce E. Erickson of the Department of Architecture of the University of Michigan, hopes to offer the building industry of Michigan a component with the following characteristics:

1. A repetitive structural system providing an efficient integration of the heating, venting, lighting and acoustical requirements.
2. A pre-cast building system that would lower building costs by an efficient use of materials and transportation methods.
3. A mass-produced building product with the potential of reducing the buildings mechanical and structural space by 30 per cent.

Important by-products of the proposed system would include reduced construction time, increased quality control and the basis for new employment opportunities. It is expected an increased flexibility of the buildings functional use may also be obtained.

The current research effort includes five related activities:

1. Development of final component and system design data
   A. Design and Stress Analysis
   B. Construction Drawings
2. Design and Construction of Prototype Model
   A. Fabrication of Casting Form
   B. Casting the Structural Components
   C. Field Construction of Prototype Model
3. System Testing
   A. Load Tests
   B. Deflection Tests
   C. Lateral Stability Tests
4. Comparison and Evaluation of Test Results
5. Economic Considerations
   A. Productivity
   B. Marketability

At the present time, the idea of component or systemized construction is being reviewed with considerable interest by many builders and manufacturers of building products. Systems of mass production are demanded by today's building technology not only because of their economic potential but also as a means of quality control. Continuing investigation of new uses of concrete will no doubt bring many such advances to the building industry in Michigan in the near future.

This article was prepared with the cooperation of the Portland Cement Association, Precast/Schokbeton, Inc. and American Prestressed Concrete, Inc.
Officers Elected to Council

The Detroit Building Employees Labor Relations Council elected new officers to serve one year terms in 1969. The Council's membership is composed of representatives from sixteen building trade associations in the Detroit area. The new president is John J. Bruny, representative of the Detroit Ceramic Tile Contractors' Association. Other elected officers are: Vice President, Frank E. Anderson, representative of the Builders' Association of Metropolitan Detroit and Secretary-Treasurer, Louis A. Scheich, of the George W. Auch Company, representing the Mason Contractors' Association.

Directors appointed at the same meeting area: Stanley E. Veighcy, representing the Associated General Contractors; Jack T. Hayes, representing the Detroit Electrical Contractors' Association and David J. Orrell, representing the Carpenter Contractors' Association.

Purpose of the Detroit Building Employees Labor Relations Council is to promote harmony, certainty and uniformity in the relations between employers and employees in the construction industry.

Michigan Graduate Awarded Medal

Morley Baer, west coast photographer of architecture and nature, has been selected the recipient of the annual Architectural Photography Medal bestowed by the American Institute of Architects.

Baer, a native of Toledo, Ohio, will receive his medal at the annual AIA convention June 26-July 1 in Denver. The award will be conferred at the convention's opening business session on Monday, June 27.

Baer, who teaches photography part-time, has produced architectural photographs which have appeared in virtually all professional magazines. His photographs of the natural scene were featured recently in the Sierra Club book, "Not Man Apart." He also specializes in capturing on film historical buildings in the San Francisco area.

A former chairman of the photography department at the San Francisco Art Institute, Baer has produced work which has appeared in the following shows: Two Buildings Exhibit (Skidmore, Owings and Merrill's Crown Zellerbach and John Hancock Buildings), at the San Francisco Museum of Modern Art; also Three Photographers, at the San Francisco Art Institute; photographs of Andalucia, Spain, which he visited in 1958, at the De Young Museum; and photographs of the California coast at the Oakland Museum last year.

Baer holds bachelor of arts and master of arts degrees from the University of Michigan. He is a resident of Berkeley, Calif.

Mason Contractors Elect Officers

The newly elected officers of the Mason Contractors Association are: President, Frank R. Krusc; Vice President, James DeMare; and Secretary-Treasurer, Louis A. Scheich. Robert Shmina, Ken Pemberton and John Hassett were elected to three-year terms on the Board of Directors.
What with today's faster pace, time-consuming meetings and tight schedules to meet, some architects pay little heed to good roof design. A roofing detail that worked for him once is sometimes used over and over again. And, at times, to his sorrow.

Who gets the blame? Invariably, the roofing contractor! Is that fair? After all, a contractor can only bid on the design and materials you specify on your plans. We contend that a lot of failures could have been prevented if more thought had been given to the roofing problem at hand.

May we suggest that you call your roofing contractor after the job has been awarded and discuss the aspects of the job with him? Perhaps you'll find that inserting an extra expansion joint or using a different flashing detail may prevent future problems for you. Don't let price alone cloud your judgement.

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Architects Cited for "Learning Center"

Smith & Smith Associates, Royal Oak architects, have received a citation from the American Association of School Administration (AASA) for the design of the new Learning Center addition for Detroit Country Day School. The DCDS project was one of 28 honored at the 230 school plants selected for exhibit from over 400 submissions from all sections of the country. These new buildings were selected by an eight-member jury of school administrators and architects as outstanding examples of school design for exhibit at the annual convention of the AASA February 12-17 in Atlantic City.

The citation particularly notes that the addition provides for changes in teaching methods and teacher-pupil relationships throughout the entire plant. The plan emphasizes independent study, self-initiative and diversification in the program.

The Learning Center, for which construction bids were received February 7, is a part of Detroit Country Day School's Development Program in connection with the school's Fiftieth Year celebration. According to Dr. W. Rodman Snelling, Headmaster, the design of the new facility has developed directly from the "educational excellence that is our goal."

Firm Opens Canadian Office

The internationally-known firm of Eberle M. Smith Associates, Inc., Architects and Engineers, has established a subsidiary located in the Equity Chambers Building, 52 Chatham West, Windsor, Ontario, President Lyndon Welch, AIA announced.

The parent firm, now in its own new headquarters at 950 West Fort, Detroit, is a complete organization including: architectural, civil, structural, mechanical, electrical, site development and landscape design and field supervision.

The firm is internationally recognized for its work in architectural engineering design and technical research. It has done notable work in the many fields including: educational, institutional, governmental, commercial, industrial and housing.

The new Windsor office is staffed by G. John Stevens, member of the Royal Architectural Institute of Canada and Arvo J. Ponti, Professional Engineer, both registered in Canada. Alex J. Craig is business manager and Robert H. Liles is director of operations. All reside in the Windsor area.

Other directors are Eberle M. Smith, FAIA; Lloyd H. Wright, AIA; Gordon R. Lotts, P.E., and Welch.

ANNOUNCEMENTS

J. Ivan Disc, AIA, is confined to the Arnold Home, 18520 West Seven Mile Road, Detroit. He would appreciate hearing from old friends in the Chapter.

The Metropolitan Detroit Millmen's Association recently announced the election of Mr. Nelson W. Kropik as President. Kropik is a graduate of the University of Detroit, 1938, BS CE. Member of the AGC, CCA, Rackham Engineers Society and the Michigan Construction Safety Conference.

Adrian R. Noordhoek and Charles W. Scurlock, members of the Western Michigan Chapter, AIA, have announced the formation of their new firm, Noordhoek/Scurlock/ AIA Architects.

Both men are graduates of the College of Architecture and Design, University of Michigan and have been active in the profession in the Kalamazoo area for several years.

The office is located at 1703 Portage Street, Kalamazoo, telephone 616-342-6606.

John H. Damman was recently elected President of the newly organized Hardware Contractors Association of Metropolitan Detroit.

Damman attended St. Ambrose High School in Detroit, University of Detroit and University of Southern California, 1942. Past President of the Architectural Hardware Consultants, Michigan Chapter.

Tivadar Balogh, AIA, the treasurer of the Huron Valley Chapter, has been elected Chairman of the Planning Commission, for the City of Plymouth, Michigan.

Vytautas J. Usas announces the opening of his office for the practice of architecture at 19504 West Seven Mile Road, Detroit. The telephone number is 313 552-1181. Mr. Usas has been a member of the Detroit Chapter since 1963.

The Carpenter Contractors Association of Detroit elected Harry L. Wette lauer, Jr. President for the year 1966.

CALENDAR

1966
April  1  Summer: Exhibit in Museum of Art: U of M; Jacques Brownson.
April  19 Joint meeting — Detroit Chapter with Student Chapters, AIA. University of Detroit.
May    3 & 4 Architect and Consulting Engineers Conference — University of Michigan, Ann Arbor.
May    12 "Design in Stainless Steel", Statler Hilton Hotel, Detroit — 5:30 P.M.
May    14 & 15 Seventh Annual Congress of the Professions, Pontchartrain Hotel, Detroit.
June 26 thru July 1 AIA Convention, Denver Hilton Hotel, Denver.
August 4 thru 6 MSA Mid-Summer Conference, Grand Hotel, Mackinac Island.

1967
April  12 & 13 MSA 53rd Annual Convention — Civic Center, Lansing.
April  13-15 Gulf States Regional Convention, Hot Springs, Arkansas.
May    10-12 Wisconsin Chapter, Lake Lawn Lodge, Delavan, Wis.
September 8-10 New Jersey Society of Architects, Essex and Sussex Hotel, Spring Lake, New Jersey.

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NEW QUARTERS TO BETTER SERVICE OUR CLIENTS.
OBITUARIES

Wilbur R. Scholz, AIA

Wilbur R. Scholz died March 7, 1966 at the age of fifty-three. A project director with the firm of Giffels and Rossetti, had been with them since 1955.

A native of Lorain, Ohio, he received his B.S. in Architecture from Ohio State University in 1935 and came to Detroit as a draftsman with the firm of Mildner and Eisen. He was later employed by Giffels and Vallet, Inc., and the firm of C. L. T. Gabler before re-joining Giffels and Rossetti.

He was a member of the Detroit Chapter, AIA and the Michigan Society of Architects.

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The building of the John F. Kennedy Underground Garage at the traditional hub of Wayne, Oakland and Macomb counties crowns a historic billion-dollar new construction year for the Detroit area. As the county trunk roads of years ago began and ended at this hub, so the focal point of area construction today is centered around the heart of Detroit. Proudly emerging within the core city, is the impressive appearance of concrete in an exciting variety of new shapes and forms. The Peerless Cement Company has served the Detroit area since 1897, and to commemorate this great renaissance of new building and spirit in our home town we have published a special edition of Peerless Profiles, saluting the many contributing forces behind this thrilling upsurge. To receive your complimentary copy, please phone or drop us a line.