

AMERICAN INSTITUTE
OF
ARCHITECTS

APR 6 1959

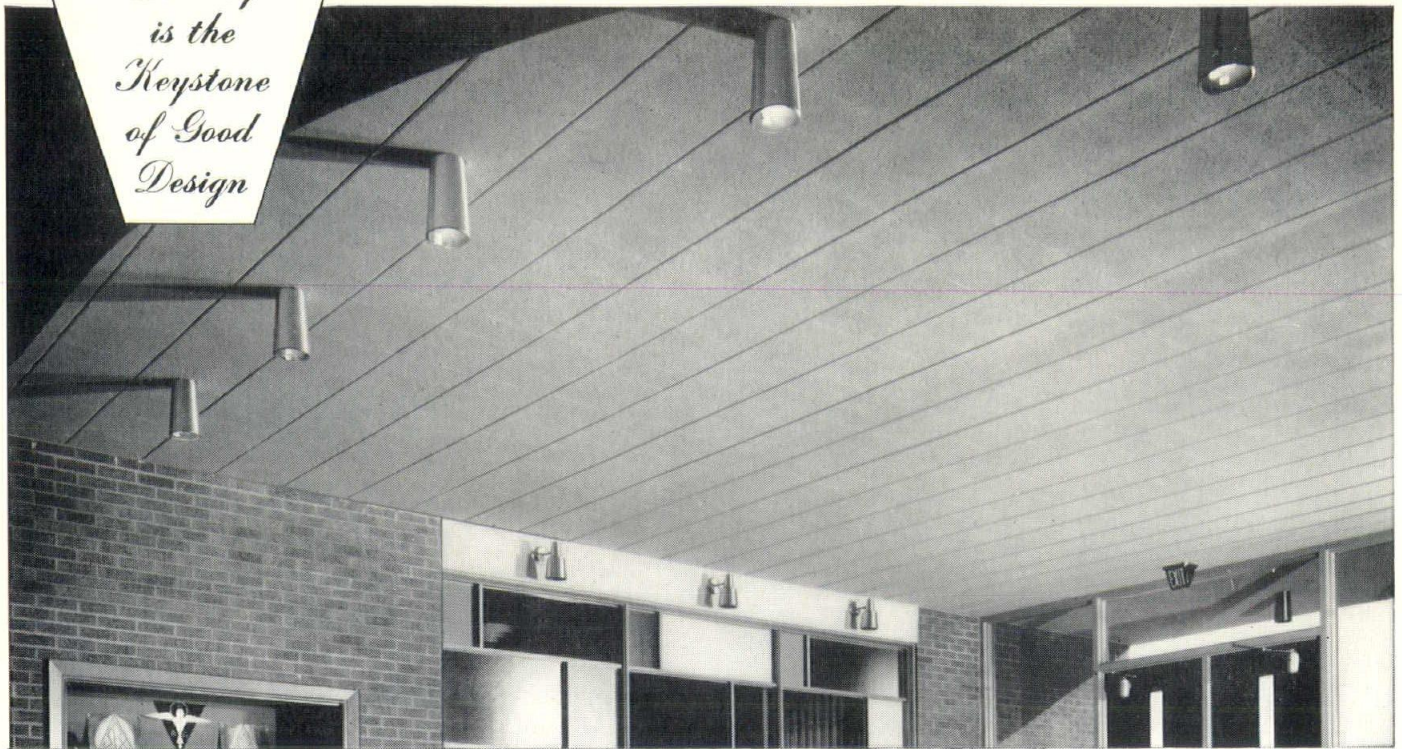
LIBRARY



INDIANA ARCHITECT

MARCH, 1959

*Quality
is the
Keystone
of Good
Design*



RAPIDEX® quality features solve more architectural problems—better

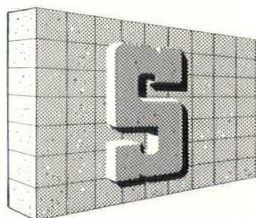
No other building material offers you so many superior construction features—or solves floor and roof problems so well—as RAPIDEX.

That's because RAPIDEX is custom fabricated and pre-assembled at the plant for each individual installation—to the most exacting quality control standards.

RAPIDEX provides all the strength, durability and fire protection of concrete—with these highly important additional advantages made possible by its special design and formulation:

- Distinctive textured surface that requires no further finishing
- Substantial reduction in dead load
- Ideal acoustical values—.55 N.R.C.
- No shoring or forming required
- Superior insulating qualities
- Fast installation by experienced crews reduce construction time and costs

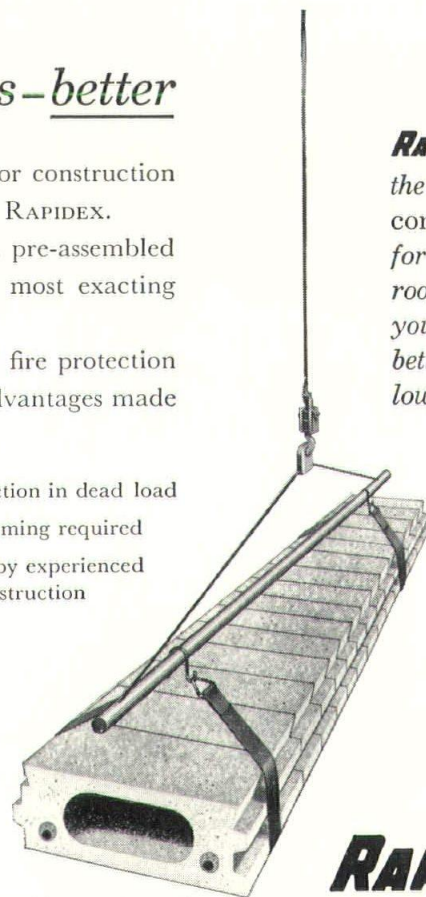
*Write for free Brochure describing
the RAPIDEX SYSTEM and illustrating
a variety of applications*



"Over 50 Years of Service to the Building Industry"

Spickelmier Industries, Inc.

1100 East 52nd Street • Indianapolis • CLifford 5-2421



RAPIDEX®
*the functional
concrete system
for floors and
roofs that helps
you build faster,
better and at
lower cost!*

RAPIDEX®



the indiana architect

OFFICIAL JOURNAL OF THE INDIANA SOCIETY OF ARCHITECTS
A CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

CONTENTS

	Page
ISA First Annual Convention	4
Student Awards Dinner	4
Great Lakes Regional Conference	5
The President Speaks	6
From the Office of William J. Strain	7
Indianapolis Home Show House	8
Architects Act On School Fires	10
Recommended Reading	13
Products, Processes, Personnel	17

CHARLES J. BETTS
President
INDIANAPOLIS

THOMAS C. DORSTE
Vice President
INDIANAPOLIS

RAY THOMPSON
Secretary
INDIANAPOLIS

WILLIAM J. STRAIN
Treasurer
BLOOMINGTON

RALPH YEAGER, JR., *Vice President*
Terre Haute

FRANK MONTANA, *Past President*
South Bend

EDWARD D. PIERRE, *Director, 1957-59*
Indianapolis

HARRY E. COOLER, JR., *Director, 1957-59*
Indianapolis

E. JACK WESLEY, *Director, 1958-60*
Evansville

JOHN D. MARTINDALE, *Director, 1958-60*
Fort Wayne

The Indiana Architect is the official publication of the Indiana Society of Architects, a chapter of the American Institute of Architects. It is published monthly in Indianapolis. Editorial and advertising offices are located at 5930 Gladden Drive, Indianapolis 20, Ind. Editorial and advertising policy for the Indiana Architect is governed by the Publications Committee, Indiana Society of Architects, whose members are Henry G. Meier and Raymond W. Ogle, co-chairmen; and Herman Blomberg, Robert N. Kennedy and Charles Pye, all of Indianapolis. The Indiana Architect is edited by Joe Ledlie, 5930 Gladden Drive, Indianapolis 20, Ind.

The opinions expressed in the Indiana Architect written by various members of the Indiana Society of Architects or persons who are not members of the I.S.A. do not necessarily reflect the opinion of the Society unless specifically stated.—The Publication Committee.

Plans Completed for I.S.A. Convention; Many Added Activities Announced

Final plans have been completed for the ISA's First Annual State Convention which will be held May 14, 15, and 16 in the Washington Hotel, Indianapolis.

Added activities and an extra day will make this year's gathering more complete in every respect, and represents a program twice as ambitious as previous annual June meetings, according to Arthur L. Burns, convention program chairman.

Highlight of the convention will be announcement of winners of the ISA's First Triennial Awards In Architecture Competition.

The Indiana Chapter of the Producers Council has been working with the Program Committee on arrangements and has made a number of very worthwhile contributions to the plans for the Convention. They will work very closely with the Indiana Society to assist wherever possible.

Mrs. Richard E. Bishop, President of the Women's Architectural League, and her group will arrange entertainment for the ladies while the men are engaged in their own activities. Mrs. Richard K. Zimmerly is in charge of this committee.

Schedule for the Convention is as follows:

THURSDAY—May 14

10:00 A.M. Registration—Washington Hotel Lobby

Producers Council Members will call at Registration Desk at regular intervals to provide transportation to Hillcrest Country Club.

12:00 Noon thru evening—Annual Golf Outing and Dinner—Hillcrest

Suite on 15th Floor of Washington Hotel has been reserved for the use of the Ladies as a Hospitality Room or Meeting Room.

FRIDAY—May 15

9:45 A.M.-11:45 A.M. — Seminar — Gold Room

1:00 P.M.—Lunch—Mezzanine

2:00 P.M.-4:00 P.M. — Seminar — Gold Room

Concurrently with these Seminars, the judging of the exhibit entries will take place. A room on the Mezzanine has been reserved for Friday and Saturday for the exhibit. Exhibit may be set up Thursday evening.

Other ideas suggested for Friday are: Interview of A.I.A. Officers on Radio Program "BREAKFAST at the 500 Club."

Possibly a breakfast party for the ladies might be held at the same time to combine with a shopping trip downtown. Depending on numbers a Style Show and "Dutch" Lunch could be arranged for the wives at some department store. Other ideas for the ladies include "Riley Trail" Tour and Tea with Mrs. Handley at the Governor's Mansion.

FRIDAY EVENING

A strictly social evening—dinner will be left to individual's choice. A block of tickets has been reserved for the opening night performance of "VISIT TO A SMALL PLANET" at the Civic Theatre . . . \$2.25.

SATURDAY—May 16

8:30 A.M.—Breakfast; Jury Report, and "coffee session" on design; comments on awards exhibit — Gold Room

9:45 A.M.—Business Meeting — 16th Floor Parlor

12:30 P.M.—Lunch—Mezzanine

2:00 P.M.—Design Seminars — 16th Floor Parlors

6:00 P.M.—Cocktails—Mezzanine

7:00 P.M.—Dinner—Mezzanine

8:30 P.M.—Dance—Mezzanine
Announcement of Awards; Guest of Honor to speak. Producer's Council Members and their wives are invited to attend.

Five Prominent Architects To Judge Memorial Awards

The American Institute of Architects has announced the names of five distinguished architects to serve as the Jury for the 1959 R. S. Reynolds Memorial Award for the most significant work of architecture, in the creation of which aluminum has been an important contributing factor.

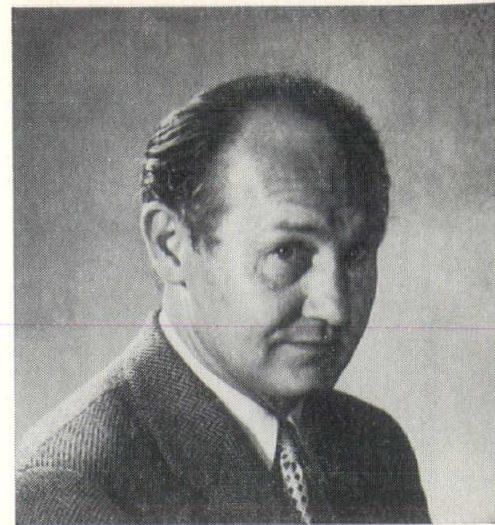
The Reynolds Award—which consists of a \$25,000 honorary payment plus an emblem—is international in character. The Jurors therefore have been selected by the AIA Board of Directors from both the U.S. and abroad.

Named to the Reynolds Award Jury were:

John Noble Richards of Toledo, Ohio;
Eero Saarinen of Bloomfield Hills, Mich.;
Robert E. Alexander of Los Angeles, Calif.;
William W. Caudill of Corning, N. Y., and
Carlos Contreras of Mexico City, Mexico.

The Jury will meet in Washington May 11 and 12 to consider nominations for the 1959 Award. The Chairman, selected by the Jury, will announce the recipient of the Award within a week after judging is completed.

The Award will be presented at the annual convention of the American Institute of Architects this summer in New Orleans, June 22-26.



Student Awards Dinner To Feature Langhorst

"Structure In Design" is the subject of a lecture to be given by Frederick L. Langhorst, A.I.A., principal speaker at the Indiana Society of Architects' Annual Chapter Student Award Meeting which will be held on the campus of the University of Notre Dame Friday and Saturday, April 10 and 11. Mr. Langhorst will illustrate his lecture and feature the works of Nervi, Torroja, Fuller, and Candella.

The lecture will be held in O'Shaughnessy Hall at 8 p.m. following dinner at 6 p.m.

The two-day session will also provide the setting for a joint meeting of the special architects-engineers committee of the ISA and Indiana Society of Professional Engineers at 10 a.m. Friday. The two groups will then have lunch together in the Morris Inn.

Besides the Langhorst lecture there will be an exhibit on "Structural Steel In Today's Architecture" which will be loaned by the American Federation of Art. There will also be a student design exhibit featuring architecture as well as automotive design.

Langhorst, a resident of San Francisco, is one of the nation's outstanding architects. Following his graduation from Cornell University he was an apprentice to Frank Lloyd Wright. Later he received the First National Honor Award of the American Institute of Architects. He has also worked in Europe and has studied under the eminent Eduardo Torroja.

The Reynolds Memorial Award is conferred annually and prime consideration is given to the creative value of the architect's contribution to the use of aluminum, and its potential influence on the architecture of our times, rather than to the size or type of structure.

The American Institute of Architects administers the nominations, Jury selection and all other aspects of the award.

Architects to Question Educational Methods At Great Lakes Conference

Architects from Indiana, Kentucky, Michigan and Ohio will ask—and answer—some self-searching questions of their profession and those who teach it when they meet on the campus of the University of Michigan in Ann Arbor for the Great Lakes Regional Conference of the American Institute of Architects, April 23-25, according to conference chairman, Joseph W. Leinweber, Birmingham, Michigan.

The conference theme, "Education and Research for the Professional Practice of Architecture," he said, will be discussed by leaders in both educational and architectural fields. These will include former presidential aide, Harold E. Stassen, three-time Governor of Minnesota; Dean Philip N. Youtz, College of Architecture and Design, U of M, and John N. Richards, Toledo, President, A.I.A.

Governor Stassen, who left his post as president of the University of Pennsylvania to serve as Special Assistant to President Eisenhower and who is currently in private law practice in Philadelphia, will key-note the Friday luncheon, Leinweber said. Stassen will spend the month of March as an educational advisor to Turkey for the President, he said. Dean Youtz will be chairman of the opening day session and Richards will give a short address at the luncheon. Marvin L. Niehuss, vice president and dean of faculty, U of M, will welcome the delegates.

Friday afternoon speakers will discuss the theme, "Is Education for the Architectural Profession a Failure?" Alexander S. Cochran, Baltimore, chairman of the Committee on Education, A.I.A., will serve as chairman of this session. Robert Hastings, Detroit, president of the Detroit Chapter, Michigan Society of Architects, will ask, "Are Professional Architects Educated?" and Edwin S. Burdell, New York, president, Copper Union for the Advancement of Science and Art, will answer him with, "The University Answers Back." Philip Will, Jr., Chicago, first vice president, A.I.A., will question the Architect's viewpoint asking, "Does the Practicing Architect Have a Viewpoint?" and Paul Ricciutti, president, National Organization of Architectural Students, will speak for the student. Roger Allen, Fellow of the A.I.A., Grand Rapids, Michigan, Architect and newspaper columnist, will key-note the Friday night banquet. Hugh W. Brenneeman, Lansing, Michigan, public relations consultant for the M.S.A. and other professional associations in Michigan, will act as toastmaster.

Still questioning, Saturday sessions will ask,

"Why Architectural Research?" Walter B. Sanders, professor, College of Architecture and Design, U of M, will be chairman of the session.

Subjects for this session will cover, "What Does the Contemporary Public Demand of the Architect?" by Paul M. Fitts, professor of Architecture and Design, U of M; "The Impact of Science on Design" by Robert W. McLaughlin, F.A.I.A. and director of the School of Architecture, Princeton University, New Jersey; "New Structures for a New Age" by C. Merrill Barber, member of the firm of Barber, Magee & Hoggman, Structural Engineers, Cleveland, and, "Old Materials in Modern Dress" by James D. Piper, vice president, Portland Cement Co., Chicago.

All business sessions of the conference will be held at the College of Architecture and Design at the U of M, Leinweber said. Bergman Letzler, Louisville, Kentucky, director, Great Lakes Region, A.I.A., will conduct all business sessions and Frederick E. Wigen, Saginaw, President, M.S.A., will act as conference host.

In addition to the business sessions, Leinweber said that many social events have been planned for the delegates and their wives. The Women's Architectural League of Detroit will provide entertainment at the conference opening social meeting, Thursday evening.

Leinweber urged that Architects planning to attend contact their local associations early in regard to reservations. The conference is open to all A.I.A. members in the Region, he said.

I.S.A. Mourns Passing Of Donald G. Hawke

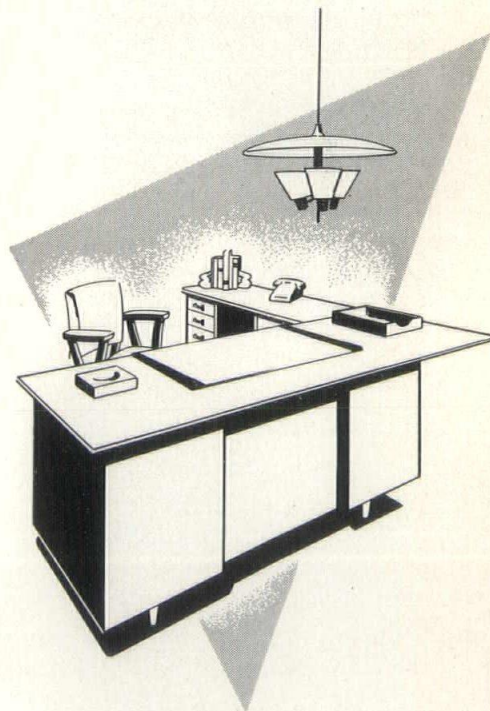
Donald G. Hawke, a member of the Indiana Society of Architects, passed away earlier this month in Community Hospital, Indianapolis.

Mr. Hawke, a native of Cincinnati who has resided in Indianapolis the past 20 years, was associated with the Alden Meranda architectural firm in Indianapolis. He was 46 years old.

Funeral services were held in Indianapolis and burial in Milford, Ohio. Besides his widow, Mrs. Mary E. Hawke, he is survived by three daughters, Misses Diane, Mary, and Nancy Hawke all of Indianapolis, and his mother, Mrs. George Hawke, of Terrace Park, Ohio.

THE OFFICE OF TOMORROW ... TODAY!

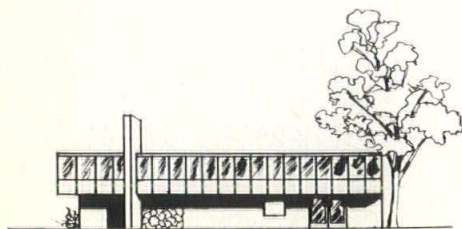
• *Endless hours of planning can be shortened by consulting a staff of specialists to handle the myriad details of your next office interior project. Whether your need is furniture, carpet, drapes, upholstery, lamps, or color consultation, a member of Burford's Design Staff can help you coordinate your office of tomorrow ... today.*



Burford's
OFFICE INTERIORS

603 E. Washington St. • MEIrose 5-7301
Indianapolis, Ind.

Products and Services for the Building Industry



The products we represent and the services we offer cover the commercial, industrial and institutional building construction field.

These products are the finest in building components. Their qualities will be most fully realized when incorporated in your structures.

We, at Hugh J. Baker & Company, are always ready to assist you with additional data on the products and services we offer.

Hugh J. Baker & Company

602 West McCarty Street • MEIrose 5-3322

INDIANAPOLIS 6, INDIANA

Branch Offices: Fort Wayne • Evansville • Decatur, Illinois

'Buildings for Business' Film Available for Public Relations

The architect's role in the design and execution of commercial and industrial structures is explained in "Buildings for Business," the fourth in the series of AIA public relations films. Primarily designed as a speaker's aid before business audiences, it will best serve its purpose if employed by the AIA chapter speaker as a curtain-raiser to a talk on the community's business buildings.

Although the series, which includes animated filmstrips on the house, the school and the church in addition to the latest release, was prepared to provide AIA chapters with a useful public relations tool, individual architects have found the films helpful in presentations to their clients—particularly school and church building committees. They are, of course, available to any AIA member as well as to chapters or other interested groups.

Each film runs 13½ minutes, is to be used in a 16mm. sound projector, and is cleared for television use. Price per film is \$65.00. Arrangements may be made to rent any of the films for a specific showing for \$5.00 on application to the Librarian at AIA headquarters in the Octagon, Washington, D.C.

F. E. GATES MARBLE & TILE CO.

Dealers in—

✓ **MARBLE**

✓ **TILE**

✓ **SLATE**

✓ **GRANITE**

Featuring—

MARKWA TILE

KENNETH D. EARL, General Manager

5345 Winthrop Ave. Indianapolis 20, Ind.

CLifford 5-2434

The President Speaks . . .

By CHARLES J. BETTS, President
Indiana Society of Architects, A.I.A.

Time is drawing near for our Annual Meeting and Convention. Plans are shaping up very well and a very interesting and informative 3 days are promised. Elsewhere in this and future issues of the Indiana Architect you will find the details.

I would like to emphasize certain of these:



MR. BETTS

The Producer's Council is an affiliated organization of the American Institute of Architects. The Indiana Chapter is most graciously cooperating and giving their full support to this program. The annual golf outing and dinner provided by them will start our convention on Thursday, May 14th. This is for the Architects.

Plans are underway to entertain the wives at the same time.

The seminar on Friday, May 15th, will be provided by the Producer's Council and will cover a subject we are all vitally interested in.

Design sessions will be held on Saturday May 16th, led by members of our Honorary Awards Jury. I'm sure every Corporate, Associate and Junior Associate member will want to participate in these informal discussions.

The Awards dinner will be on Saturday evening. Our A.I.A. President, John Richards will be the speaker. We are honored to have him as one of our jury members and our speaker.

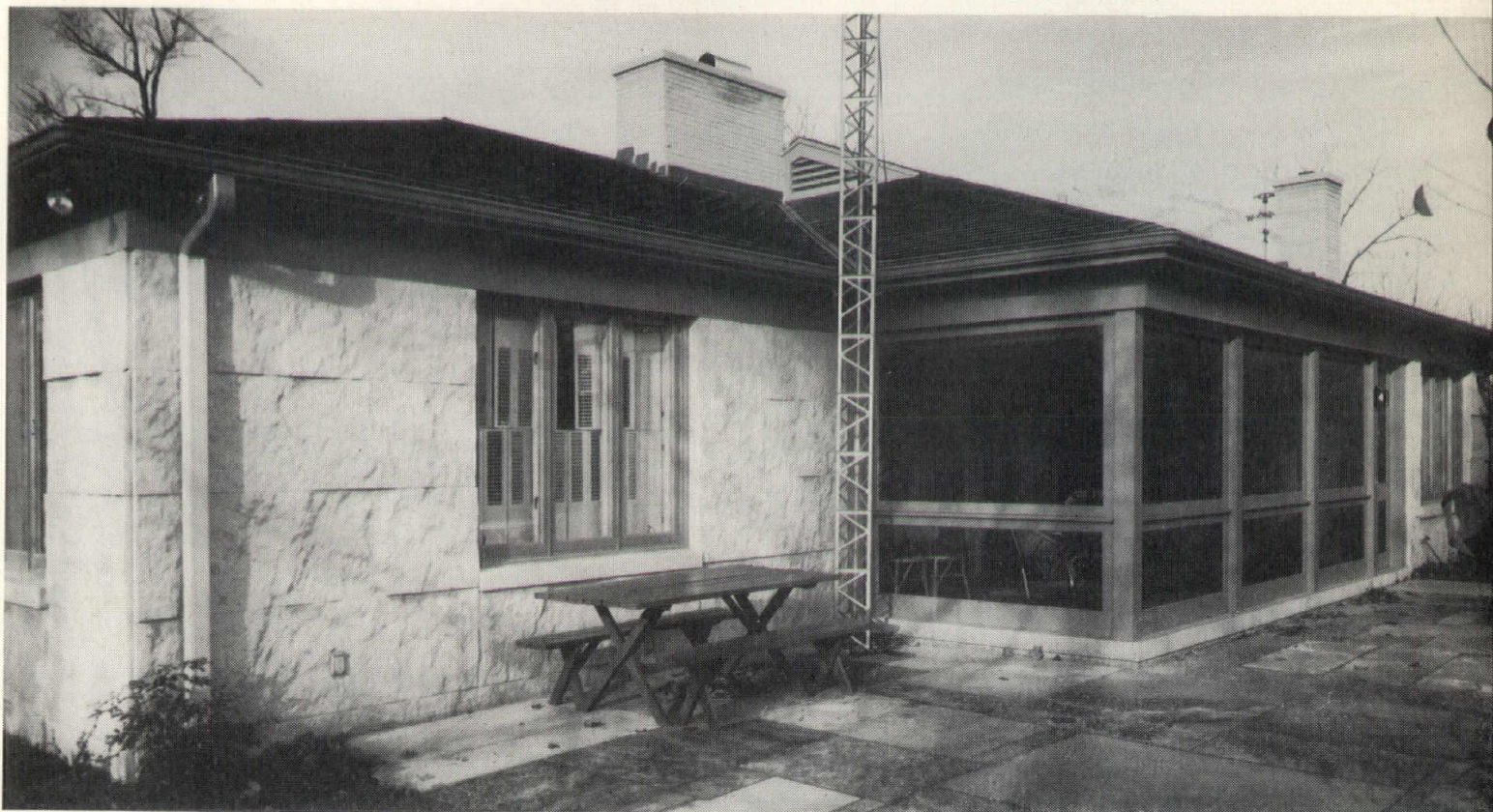
This promises to be the best annual meeting we have had for years and we know you will be the loser by being among the missing few.

Don't forget:

1. Your Honor Awards entry.
2. Register and attend the 3 day session.
3. Close your office and allow the future leaders of the Indiana Society to participate. This is to your advantage.
4. The dates: Thursday, Friday, Saturday—May 14-15-16. See you there.

**NO OTHER PUBLICATION
— LOCAL, STATE, OR NATIONAL — COVERS THE
IMPORTANT BUILDING INDUSTRY FIELD IN INDIANA AS
EXTENSIVELY AS THE INDIANA ARCHITECT.**

... from the office of William J. Strain, Bloomington



These pictures show a unique texture of Indiana Limestone used in the house of Dr. and Mrs. Philip T. Holland, of Bloomington, Indiana.

The stone used here is taken from the outside cut of large quarry blocks. The surface which is exposed is the original top or bottom of a quarry block as it is split out of the ledge, after the vertical cuts, with channeling machine. Stone men call such pieces of stone "rough-backs," or stone which is usually wasted. But in this case it was given special selection and handling.

Dr. Holland had stated that he wanted his home to look as much like a single block of Indiana Limestone as possible. He specifically did not want a smooth appearance, which might have been obtained by using cut stone. Nor did he want one of the more customary split-face finishes in smaller pieces.

The exterior stone was made in 2 foot course heights, and lengths up to 7 feet. The 4-inch thickness is backed up with 4 inches of light weight concrete block making a cavity wall. Rigid anchors were used rather than the light weight anchors, because of the large sections of stone.

The floor system is Rapidex, over which is applied in various rooms, either slate flooring, vinyl tile, carpeting or Bruce oak strip flooring on short floating sleepers attached to the top surface of the Rapidex with mastic.

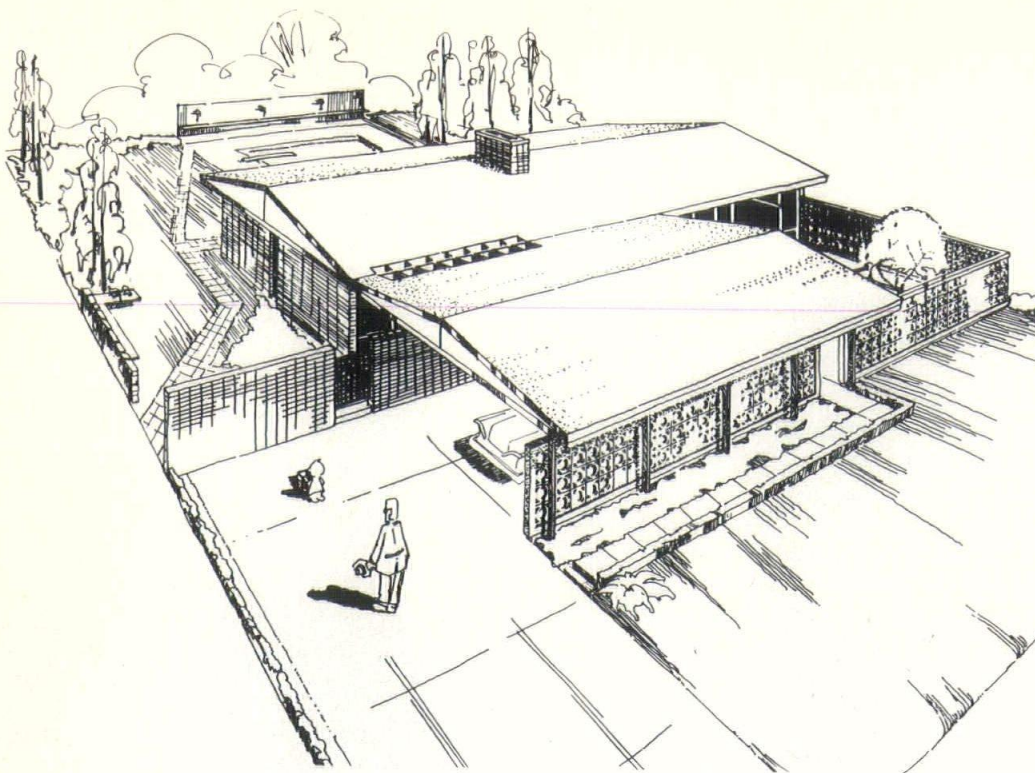
The roof construction is conventional wood frame protected by metal lath and plaster. The shingles are heavy Carey Fire-Chex shingles.

Dr. and Mrs. Holland carried a considerable amount of sentimentality to this home when leaving their former home in a century old edifice. The interior was worked out for use of antique



furniture and inside shutters. The Hollands had a considerable number of items of antique furniture, china, and glassware which were family heirlooms. All this they desired to accommodate without the penalties of multi-story construction, high ceilings, and intricate woodwork.

The builder was Harry J. Smith, Bloomington.



Indianapolis Architects Design Home Show House

The model house for this year's Indianapolis Home Show which opens at the State Fairgrounds April 10 was designed by members of the Indianapolis Section, Indiana Society of Architects, and will combine contemporary and traditional tastes.

Created for a family of two adults and two teen agers, the selected house—a one-story plan—is the architect's conception of what contemporary Hoosiers want. But, influencing the design as much as teen agers was the recent women's Congress on Better Living held in Washington. Delegates to the Congress expressed a desire for larger rooms and more storage space in homes.

Most striking feature, differing from the past few years' model houses, is the complete deviation of design from extreme contemporary which called for a living-dining room combination. Instead, the 1959 model goes back to the traditional separate formal dining room and sitting room with the insertion of contemporary influence in its very large family room.

Basically, the house has been designed for two kinds of living—adult on one side and teen age on the other. It echoes a "Home On The Range" type of feeling catering to parents who prefer entertaining at home in the formal sitting room while their children entertain simultaneously in the family room.

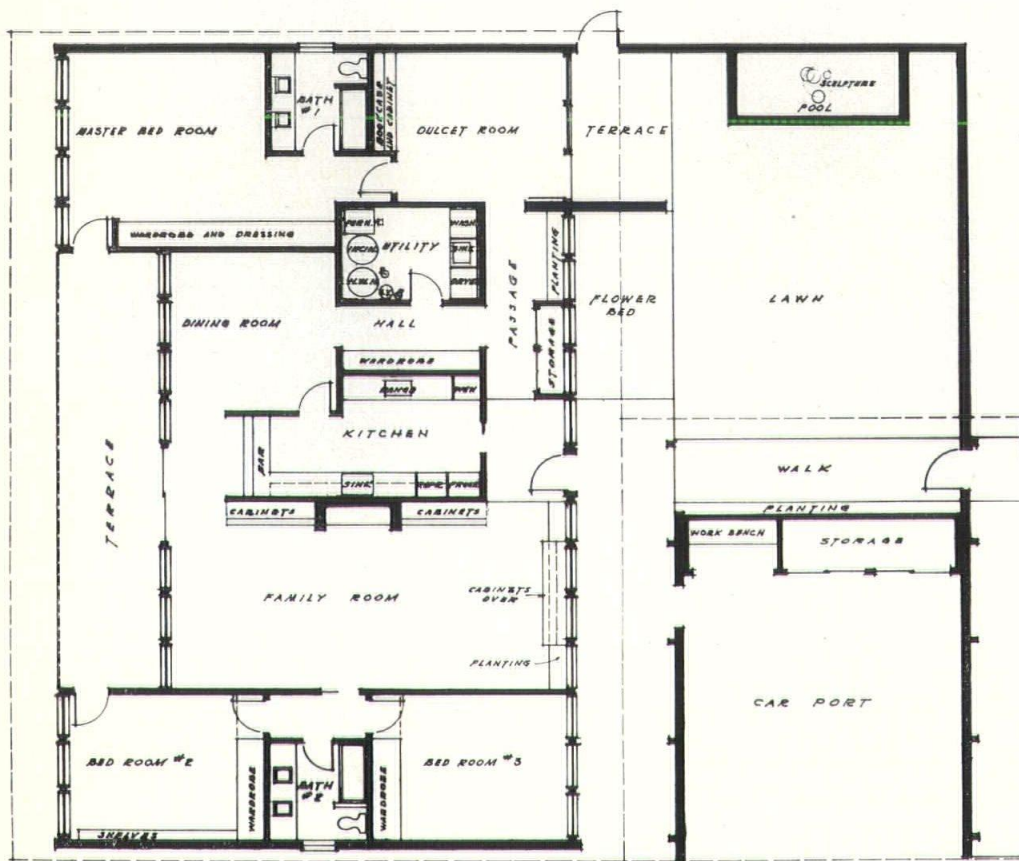
To create an air of privacy for both groups the sitting room and family room are separated by kitchen and dining rooms.

This separation goes even further giving the illusion of almost two separate houses in one with shared kitchen and dining room. Teen age bedrooms and a full bath are on the side of the house where the family room is located while the parents' master bedroom and full bath are located next to the sitting room on the other end of the ranch-type structure.

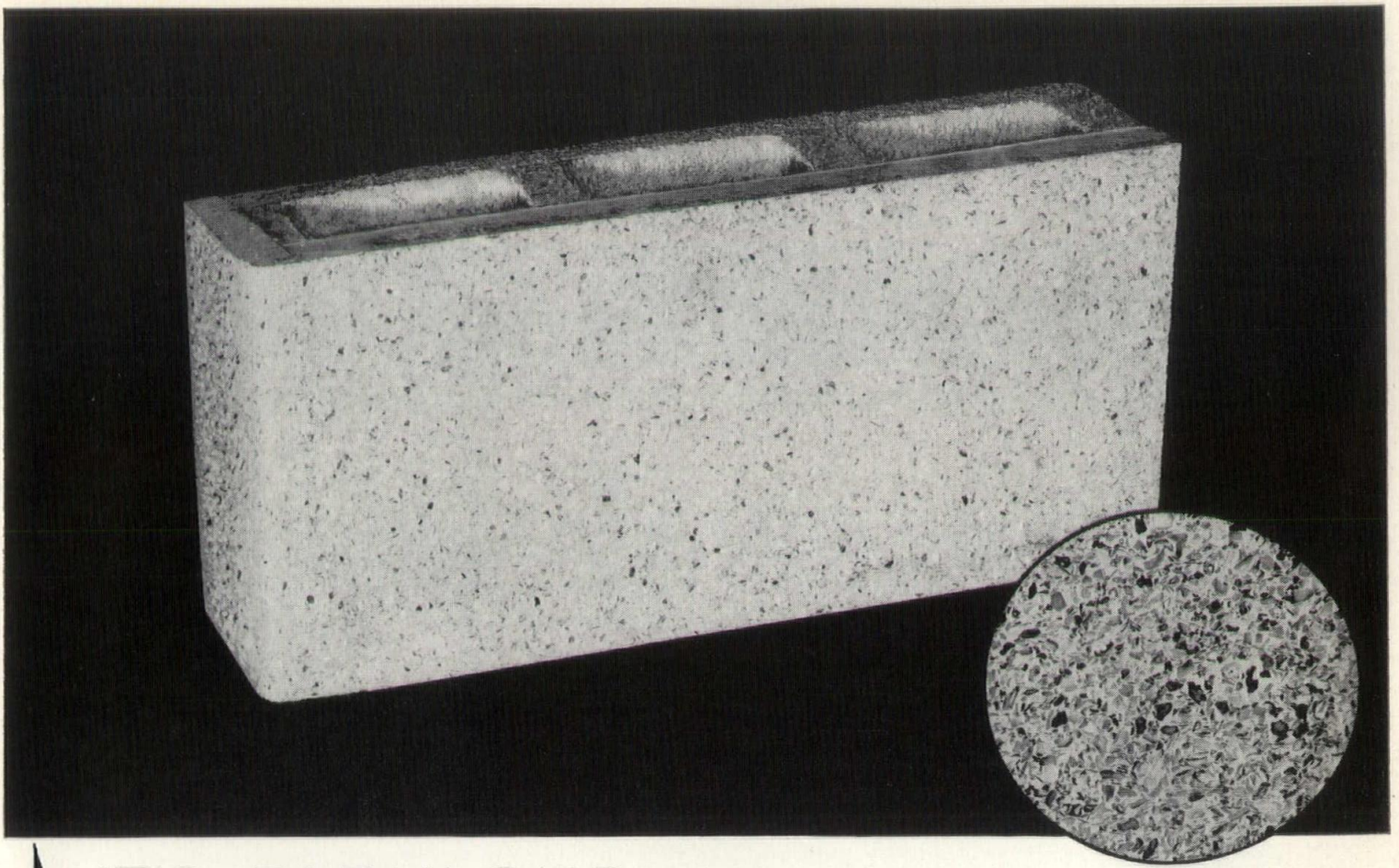
Rich walnut will be used for all cabinets and woodwork in the interior. The walnut theme will be repeated in parquet wood floors in the sitting room, family room and three bedrooms.

Three terraces—one opening from the dining room, one from the sitting room and one from the front vestibule, will have slate floors. The slate will be carried inside to the entrance vestibule and kitchen flooring.

Aside from one wall of the family room being wood panel, the rest of the house will have a unique conformity. Two sides of the exterior of the home will be of solid masonry—the masonry to be used on the interior of these walls also. The other two sides of the house will consist of white and gray wood panels with bright accents and awning-type windows in abundance.



FLOOR PLAN
1957 HOME SHOW HOUSE

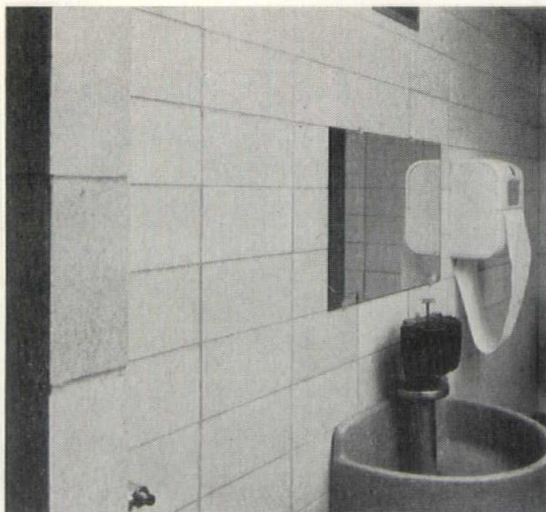


IT'S FABULOUS
IT'S NEW . . .

Aristocrat **BLOCK**

PATENTED

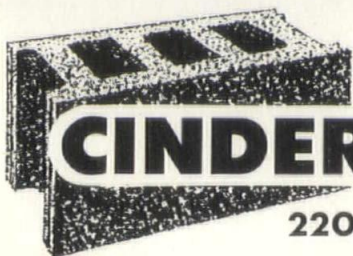
with handsome . . . smooth . . . terrazzo-like plastic face



BEHOLD our new Aristocrat block! Now with pre-finished Aristocrat block, a completely finished load-bearing wall can be erected in one operation, eliminating need for lathing, plastering and painting.

This new construction material is created by a patented new process which combines terrazzo-like aggregates with plastic, and molds the combination to concrete block in an integral, permanent bond. Finished surfaces are cut and ground to close dimensional tolerances, assuring exact parallelism of surfaces. In appearance the block resembles granite.

Architects and builders are provided with a wide choice of color, texture and design. Unlimited uses for exterior and interior walls, floors and sills. The block is fire-resistant, weather-proof, water repellent and permanent in color. Call today so we can give you all the additional details about Aristocrat block and how it can serve you best.



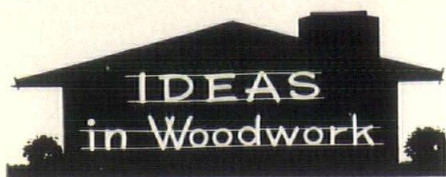
MADE FOR THE CENTRAL INDIANA AREA EXCLUSIVELY BY

CINDER BLOCK & MATERIAL CO.

2200 N. Montcalm St.

Phone ME 2-1432

Indianapolis



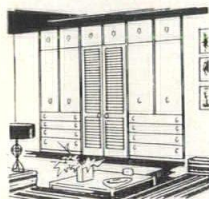
Bilt-Well awning windows are available in a wider choice of sizes and operating mechanisms.



Bilt-Well Belvedere doors are made of clear, kiln-dried Ponderosa pine treated to NWMA standards.



Specify Bilt-Well windows, doors and cabinets. Sold by better lumber dealers . . . since 1866. Fast delivery from our Indianapolis warehouse.



Bilt-Well offers the widest selection of cabinet sizes, styles, types . . . for kitchen or other storage need. Birch fronts or Ponderosa pine.



Bilt-Well Super 7 removable windows feature stainless steel weatherstripping.



**BILT-WELL
ARCHITECTURAL
DETAILS**

Write, wire or telephone collect for your free file of details on the complete line of Bilt-Well windows, doors and cabinets.

Adams-Rogers, Inc.

P. O. BOX 154 • INDIANAPOLIS 6
PHONE: MELROSE 2-5455

Nation's Architects Stirred to Action By Recent Disastrous School Fires

**American Institute Of Architects Calls For National Conference
Hope to Meet With Agencies And Authorities On School Safety**

The American Institute of Architects has called for a "national conference on school safety" to help architects, engineers, fire marshals, educators and local building authorities intensify the search for fire-safe school building plans.

The call was issued by the AIA Board of Directors at the beginning of its annual meeting in Washington, D.C., March 9-12.

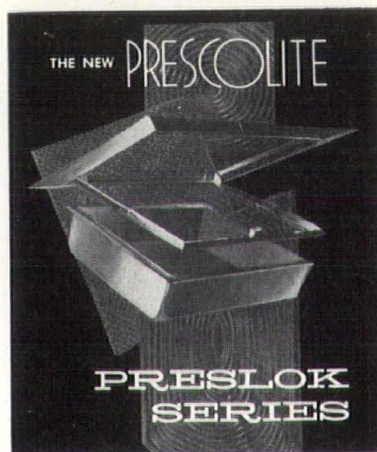
"The recent school fire tragedies at Chicago and near Little Rock, Arkansas, make a national conference on school safety imperative," the AIA directors stated. "All of us who share in the responsibility for school safety must pool and coordinate our experiences and findings. We owe no less to the parents of America.

"It is a gratifying fact that there has been no report of any fire in a recently completed school building," the AIA directors stated. "The buildings in Chicago and the reform school near Little Rock were among the far too many obsolescent school plants which should have been modernized or replaced long ago.

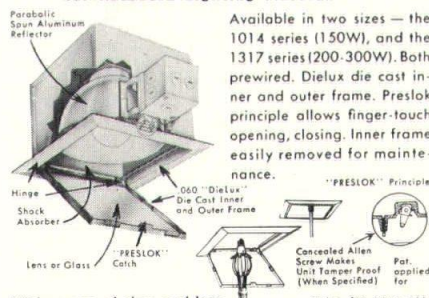
"There must be an orderly approach to the improvement of local fire codes," the AIA statement continued. "Fire codes often differ radically in different communities. Some are far too lax. Others tend to be over-zealous and set back recent advances in school design and school building economy. Our aim must be not to interfere with progress but to assure the maximum amount of fire safety for our children.

"In the hope of advancing this aim the American Institute of Architects would welcome a national conference on school safety. We would like to meet with representatives from the agencies and authorities concerned with this problem—the fire marshals, the fire insurance underwriters, the engineers, and the school administrators. Such a conference might be held at The Octagon, our national headquarters in Washington, D.C. It should arrive at practical recommendations to the local authorities."

The AIA directors praised the efforts of both the AIA Committee on School Building and Educational Facilities and the AIA Co-

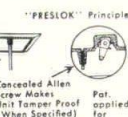


featuring
A New Conception in Hinged Frames
for Recessed Lighting Fixtures



Wide range of glass and lens styles, and frame finishes.

Available in two sizes — the 1014 series (150W), and the 1317 series (200-300W). Both prewired. Diecast inner and outer frame. Preslok principle allows finger-touch opening, closing. Inner frame easily removed for maintenance.



Write for your copy of the Complete PRESCOLITE Catalog



PRESCOLITE MANUFACTURING CORPORATION
HOME OFFICE: 2229 Fourth Street, Berkeley, California
FACTORIES: Berkeley, Calif. • Mesham, Pa. • El Dorado, Ark.

THE MARK
OF A WELL
ORGANIZED
EXECUTIVE

BUSINESS

101 SOUTH
PENNSYLVANIA

Committee on Human Safety. "The devoted voluntary work of these AIA committees has largely contributed to the constant improvement of building safety.

"We are proud to note that despite many improvements in school design and a more attractive appearance of most modern school buildings, the average cost of school construction has increased only half as much in recent years as the cost of other building types," the statement added.

Meanwhile, regarding the horrible holocaust that occurred last December 1, 1958, at Our Lady of the Angels School in Chicago, the National Fire Protection Association has made a comprehensive report which appeared in their January issue of the NFPA Quarterly. It might be pointed out, however, that although the NFPA report blamed the principal cause of loss of life to "inadequate exit facilities," Chicago Fire Commissioner R. J. Quinn felt that exit facilities were adequate, and that the cause was "delayed alarm to the fire department."

Following in part is the NFPA report:

Again it must be written that the lessons learned from this fire repeat lessons learned years gone by. Again it must be said that conformity to the provisions of the Building Exits Code would have prevented this disaster. Again it must be wondered how much longer it will be before the lessons so tragically brought home repeatedly by school dis-

asters are applied to all schools.

The loss of life in this fire was primarily due to inadequate exit facilities. This is a basic principle of life safety from fire. Five other weaknesses in the fire safety of the building also made major contributions to this holocaust.

Exits

Basically, the adequacy of exits is determined by proper enclosure, by provision of at least two ways out remote from each other, and by sufficient exit capacity so that all occupants can leave the building promptly. In none of these respects were the exit facilities of Our Lady of the Angels School adequate.

Preordinance Building

In 1949 the city of Chicago adopted a Municipal Code which incorporated all the major features necessary for life safety from fire in buildings, including enclosures of stairways in schools. However, important provisions of this code, including enclosure of exits, did not apply to the north and south wings of Our Lady of Angels School and to other schools in existence when this code was adopted. In other words the substandard exits in all but the annex (built in 1953) were of preordinance vintage, hence the non-retroactive law did not apply. Why the annex stairs were not enclosed to comply with the law is not known.

(Continued on Page 19)



FURNITURE CO.
JOHN OBER
1475 PRESIDENT

Quality Fluorescent Lighting Fixtures

with any
type shielding
you desire



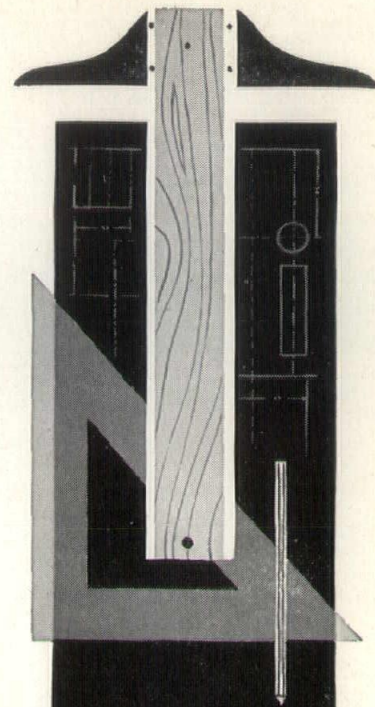
IN BUSINESS OVER 25 YEARS

RON GILES, Indiana Rep.

3325 W. 58th St. Indianapolis, Ind
Phone CLifford 3-0910

Louisville Lamp Co., Inc.

724 W. BRECKINRIDGE ST.
LOUISVILLE 3, KENTUCKY



*Call Us
for Complete
Engineering
Service . . .*

We feature

Fenestra's

panels, sash and doors

Call us today for free design . . . construction and application to building construction information. . . .

You can depend on better service with **FENESTRA** state-wide coverage from the following Indiana agents:

- **INDIANAPOLIS**
Clark Engineering Products Co.
3353 Central Avenue
- **FORT WAYNE**
Jones Engineering Products, Inc.
3416 Fairfield Ave.
- **TERRE HAUTE**
Enterprise Metal Products
P. O. Box 127
- **RICHMOND**
Runnels Builders Products
306 Randolph St.
- **EVANSVILLE**
Somers Engineering Sales
1567 S. Alvord St.
- **SOUTH BEND**
E. R. Newland Co., Inc.
1401 S. Main St.



TELKEE

MODERNIZES

KEY CONTROL

and is a low-cost investment that pays for itself in a short time.

Telkee will . . .

save on replacement costs for locks because better duplicate keys can be cut. Add complete security to all keys. Control unlimited number of keys, and make any key available in seconds. Savings in time alone are worth the price of a Telkee System.

FREE BOOKLET: Write today for the complete story of Telkee Systems. Ask for free booklet: "The Key To The Whole Thing."

Address Dept. A-1



The MOORE KEY CONTROL® Systems

P. O. MOORE, INC.

A SUBSIDIARY OF SUNROC CORPORATION, GLEN RIDDLE, PA.

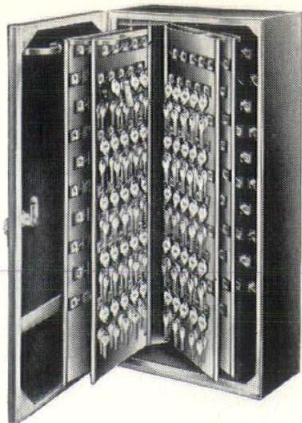
Represented in Indiana by

C & H SALES CO.

325 Bankers Trust Bldg.

Phone MEIrose 8-4342

INDIANAPOLIS 4, INDIANA



ARISTOCRAT WALL CABINET

Dimensions:

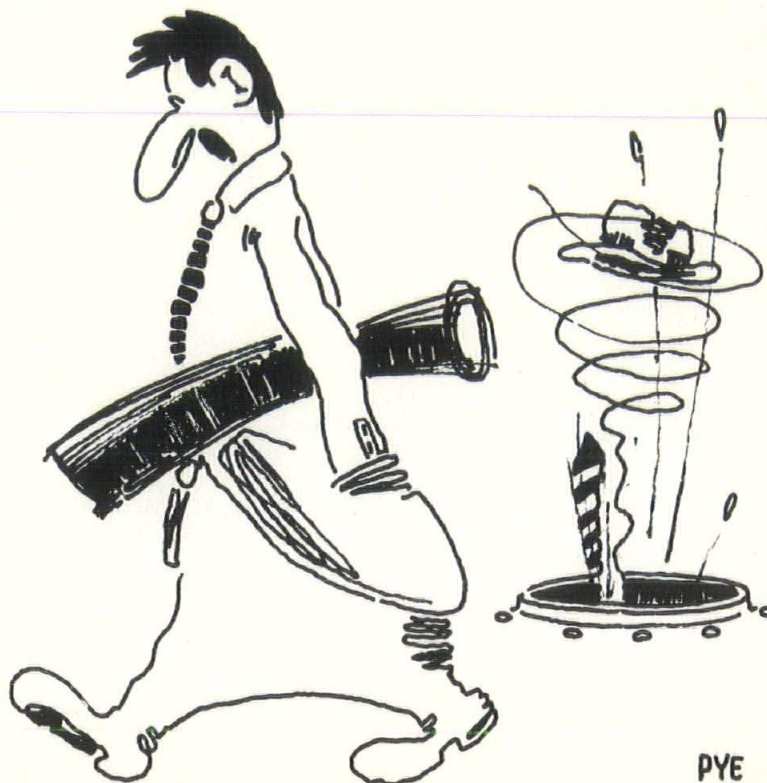
27" high, 13" wide, 7 7/8" deep.

Capacity: 150-450 keys.

Also available fully recessed.

Write for dimensions.

WATCH THOSE OPEN DRAINS



PYE

**MEMBRANE FIREPROOFING—
GIVES FIRE SAFETY
TO A LIGHTENED STRUCTURAL FRAME
WITH GENUINE . . .**

LATH and plaster

MEMBRANE FIREPROOFING—

- REDUCES COSTLY UNNEEDED STRUCTURAL WEIGHT
- PROVIDES ARCHITECTURAL VERSATILITY WITH ECONOMY

INVESTIGATE — SPECIFY — DEMAND

THE FIRE SAFETY AND ECONOMY OF LATH AND PLASTER



Lathing & Plastering Bureau of Indianapolis, Inc.

Business Manager: BRUCE H. MORFORD — 4853 KATHERINE DRIVE — LAWRENCE, INDIANA — LI. 7-4596

P.O. BOX 572
INDPLS. 6, IND.

Recommended Reading . . .

A comprehensive new book, **THE SELECTION OF RETAIL LOCATIONS**, offers the first authoritative study of site selection and business volume estimating for establishments selling consumer goods or services. Written by a leading real estate economist, Richard L. Nelson, the 422-page book published by F. W. Dodge Corporation, New York. (\$9.00).

The right location is of prime importance to any business that requires the consumer's presence on the premises. Will it intercept traffic? Should it be near a competitor? Should it be in a shopping center, or located separately? Can the area's retailing trend be predicted with favorable results? These are just a few of the hundreds of factors to be considered, all of which are fully discussed by the author, who presents a scientific approach to solving location problems.

Of special interest is Nelson's treatment of retail compatibility. He takes into account the advantages of business interchange, as a shopping center, but also shows in detailed tables how various types of retail outlets can have beneficial, neutral, or negative effects

upon each other. This unusual material, both text and tables, is a new and valuable tool in site selection and better store arrangement.

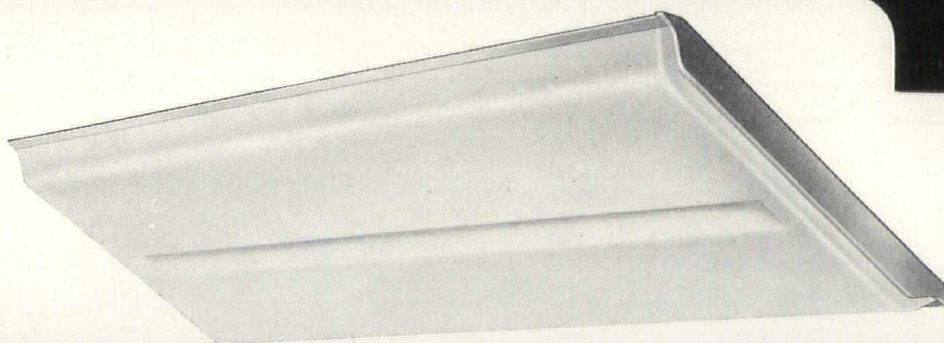
The contents of this book are arranged into five major sections. "**The Influence of Location on Retailing**," covers retailing and the growth of cities, the influence of decentralization, and current trends affecting location. "**The Selection of a Location**," gives general information on the importance of location today, the principles of retail location, the theory of cumulative attraction, Nelson's rule of compatibility, information on selecting downtown and outlying locations, and on locating banks and savings and loan associations. "**The Technique of Estimating Business Volume**," covers the purpose of volume estimating, outlines various estimating techniques gives methods for estimating business volume for solitary locations, and offers valuable information on the role of the consultant. "**What About Shopping Centers?**" includes a detailed analysis of shopping center types, the effect of their designs, their parking requirements, and information on leasing, financing, management and promotion of shopping centers. In addition, this section contains a three-chapter Economic Analysis of a Shopping Center which delineates the trade area, covers the field work, and offers

the technique for data evaluation and conclusions. The final section, "**New Trends in the Economics of Location**," covers trends in financing and leasing for individual stores, offers new solutions for older shopping districts, gives important information on city planning and retail locations, and on developing patterns of the future.

Throughout the book, Nelson has included graphs, charts, plans, and drawings for easy, immediate reference for specific problems.

Richard L. Nelson drew upon more than 20 years of experience in preparing the material for this book. He is a real estate economist and president of Real Estate Research Corporation and its affiliate, Western Real Estate Research Corporation, the largest organization in the country dealing with shopping center analyses, retail and industrial location problems, market value appraisals, and economic studies in urban renewal. In addition, he serves as a consultant to many large retail chains, industrial firms, transportation companies, and local and national government bodies. He is chairman of the Land Economics Foundation, and is a member of the American Institute of Real Estate Appraisers, Society of Residential Appraisers, Institute of Real Estate Management, and Society of Real Estate Counselors.

SHALLORAMA LIGHTING SO SHALLOW IT LOOKS RECESSED



Shallorama® brings a new dimension to architecturally designed lighting. Surface mounted, these fully enclosed Visionaires® look recessed. Handsomely formed translucent white, long-life Plexiglas diffusers open from either side on concealed, continuous "hook-on" hinges. No "hardware" mars the beauty of Shallorama®. They are amazingly simple to install and normal maintenance can be accomplished without the use of tools.



SUNBEAM LIGHTING COMPANY • LOS ANGELES | GARY

I.S.A. Calendar of Coming Events

DATE	TYPE OF MEETING	LOCATION
Friday and Saturday, April 10 and 11	General Meeting and Executive Board	South Bend
April 24 and 25	Great Lakes Regional Meeting	Ann Arbor
Friday, May 1	Executive Board	Indianapolis
Thursday, Friday and Saturday, May 14, 15 and 16	Annual Meeting and Honor Awards Exhibit	Indianapolis
June 22 through 26	A.I.A. Convention	New Orleans, La.

Congressman Supports Preservation Measure

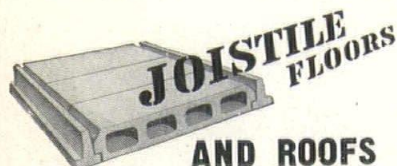
United States Congressman Frank Thompson, of New Jersey, a good friend of architectural preservationists and all those concerned with cultural and artistic matters, has introduced a new bill (H.R. 4046). It would provide for a determination of whether certain sites or buildings such as the San Francisco Mint and the Morristown National Historical Park, which are threatened with destruction, are of national historical significance.

Others sponsoring this legislation to preserve America's cultural heritage include Congressmen Curtin (Pa.); Merrow (N.H.); Reuss (Wis.); Smith (Miss.); Wainwright (N.Y.); Widnall (N.J.); Wright (Tex.).

The recent controversy over the preservation of the San Francisco Mint is responsible for a year-long study being undertaken at the University of California on how San Francisco might retain its existing architectural landmarks and monuments as the city develops and rebuilds. Assistant professors Stephen W. Jacobs and Barclay G. Jones hope to find solutions to some of the major problems that prevent the best use of artistic, historic or socially significant structures in urban redevelopment.

Supported by a grant-in-aid from the Rockefeller Foundation, the study is sponsored by the U.C. college of architecture and the city and regional planning, and landscape architecture departments, with the cooperation of the Northern California Chapter and the San Francisco city planning department. It is believed that the findings will be useful to other cities.

ECONOMICAL



- Rigid
- Fireproof
- Long Span
- Unbelievable Economy

PRECAST CONCRETE

- No Forming
- Flush or Beam Ceilings
- 60% Noise Reduction



JOISTS

WRITE OR CALL US FOR INFORMATION ON THESE PRODUCTS

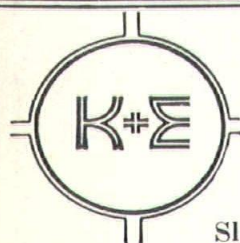
MASOLITE DIVISION

GENERAL DREDGING COMPANY, INC.

2200 La Fontain Street

FORT WAYNE, INDIANA

PHONE A-1453



• Blue Prints • White Prints • Photo Copies

Pick-Up and Delivery Service

Exclusive
K&E DEALER

Slide Rules • Measuring Tapes
Surveying Instruments, for Sale or Rent
Level Rods and Poles • Complete Stocks
LeRoy Lettering Instruments & Supplies

FOR BETTER SERVICE . . .

2 — CONVENIENT LOCATIONS — 2

MARBAUGH Engineering Supply Co.

- 140 E. Wabash St., Indianapolis
- 5226 N. Keystone Ave., Indianapolis

MELrose 7-3468
CLifford 1-7070

BURNET-BINFORD LUMBER CO., Inc.

IMPORTED & DOMESTIC HARDWOODS—FINE CUSTOM MILLWORK

Two Modern Mills—50 Capable Craftsmen

1401 W. 30th ST.

INDIANAPOLIS 23, IND.

WALNUT 6-3315

Tebco Face Brick



for UNMATCHED
Quality... Beauty... Value

Tebco Face Brick, standard of quality and beauty, costs no more than ordinary brick! Choose from 31 distinctive color combinations and four textures . . . smooth, vertical scored, matt, and velour. Available in three sizes . . . Standard, Roman, and Norman. Evans million-brick-a-week production assures prompt delivery. Specify and buy Tebco for matchless quality, beauty, and value!

*Tebco Face Brick meets all standards of the American Society for Testing Materials (ASTM)
and Federal Specifications issued by the General Services Administration (FS)*

Illustrated: **TANGERINE BLEND (45K)**, a warm mixture of Matt textured color tones.



THE EVANS BRICK COMPANY

General Offices: Uhrichsville, Ohio • Telephone: WAInut 2-4210

Sales Offices

Cleveland, Ohio
Columbus, Ohio
Pittsburgh, Pa.

Detroit, Mich.
Bay City, Mich.

Fairmont, W.Va.
Toledo, Ohio
Philadelphia, Pa.



One of the nation's largest producers of clay pipe, clay flue lining, wall coping, plastic pipe and related construction materials, with over 50 years of faster, friendlier service.

Indiana Society of Architects Sustaining Firm Members

*Board of Church Extension, Disciples of Christ
Indianapolis, Indiana*

*Bradley & Bradley, Architects
Fort Wayne, Indiana*

*Daggett, Naegele & Daggett, Inc.
Indianapolis, Indiana*

*Medland & Bowman, Architects & Engineers
Logansport, Indiana*

*William J. Strain, Architect
Bloomington, Indiana*

*James McClure Turner, Architect
Hammond, Indiana*

*Vonnegut, Wright & Porteous, Inc.
Indianapolis, Indiana*

*Edward D. James & Associates, Inc.
Edward D. James, Architect, Inc.
Indianapolis, Indiana*

*Dorste & Pantazi, Architects
Indianapolis, Indiana*

*Walter Scholer & Associates
Lafayette, Indiana*

*Fleck, Quebe & Reid, Associates, Inc.
Indianapolis, Indiana*

*W. Erb Hanson & Associates
Connersville, Indiana*

*Wilson & Terwilliger, Architects
Richmond, Indiana*

*David J. Katz, Architect
Gary, Indiana*

*Guyer, Guyer & Guyer, Architects
New Castle, Indiana*

*Paul Frank Jernegan, Architect
Mishawaka, Indiana*

*R. S. Kastendieck & Co., Architects
Gary, Indiana*

*Martindale & Dahlgren, Architects
Fort Wayne, Indiana*

*O. A. Tislow, Architect
Indianapolis, Indiana*

*Walker, Applegate, Oakes & Ritz Architects, Inc.
New Albany, Indiana*

*Johnson, Ritchhart & Associates
Anderson, Indiana*

*Louis C. Kingscott & Associates, Inc.
Fort Wayne, Indiana*

*Lester W. Routt & Associates, Inc.
Vincennes, Indiana*

*D. A. Bohlen & Son
Indianapolis, Indiana*

*Donald D. Dick, Architect
Indianapolis, Indiana*

*Evans Woolen III, Architect
Indianapolis, Indiana*

Does Your Firm Have an Effective PR Program?

Here is a quiz to measure the public relations performance of your firm. Although it was intended for architectural firms and was written by the American Institute of Architects' public relations counsel, it might well be applied to numerous other types of organizations, professional or otherwise. Answer by checking the proper spaces. Then check at the end to determine your score:

1. Is your office a good showcase of design?

Yes No

2. Does someone have specific responsibility for supervising and maintaining a public relations program for your firm?

Yes No

3. Do you know personally the building page editor of your community newspapers?

Yes No

4. When you have completed a rendering of a new building for your community, do you send photographs or copies to your newspapers?

Yes No

5. Have you made a speech before a public group in your community during the past three months?

Yes No

6. Do you offer material to your professional magazines?

Yes No

7. When you design a bank, school, or other building of specialized interest, do you offer information on it to the trade magazines which service that field?

Yes No

8. Does your firm have a brochure to hand to prospective clients?

Yes No

9. Do you maintain a file of slides of your best projects for use in appearances before public groups and prospective clients?

Yes No

10. Do the principals of your firm belong to community civic and service groups?

Yes No

11. Are you personally acquainted with the heads of your municipal government?

Yes No

12. Are you personally acquainted with the congressman from your district?

Yes No

13. Do you support the public relations program of your chapter? (If your chapter

does not have such a program, but you have campaigned for one, answer affirmatively.)

Yes No

14. When new partners, associates, and project heads are appointed or promoted, do you send the information to your newspapers' business page and/or city editor?

Yes No

15. Do you have an established system of informing your employees on what your firm stands for and how it serves the community?

Yes No

16. Do you handle all callers and prospective clients courteously, even though you are not interested in handling the type or size of projects they may outline?

Yes No

17. Do you offer aid and counsel to building owners, realtors, and builders with whom you deal in their development of publicity on building projects?

Yes No

18. Do you personally, or through your chapter, offer counseling services to your municipal school system in vocational guidance programs?

Yes No

19. Do you keep track of the policies and activities of your professional organization through the A.I.A. Memo, Journal, and your state and chapter publications?

Yes No

20. Do you personally see to it that your chapter keeps your regional public relations committee member informed on your community's public relations problems so that the information can be transmitted to A.I.A. public relations counsel?

Yes No

Score five points for yourself for each of the quiz questions to which you answered "yes." 80-100 points represents an **excellent** public relations program; 70-80 is **good**; 50-70 is **poor**. Under 50: you must be an awfully good architect to stay in business.

THE INDIANA ARCHITECT

PRODUCTS · PROCESSES · PERSONNEL

Cinder Block & Material Co. Offers New Concrete Block

A revolutionary new concrete block with smooth, chipped-marble plastic face is now being made and marketed exclusively in this area by the Cinder Block and Material Company of Indianapolis, according to Stewart D. Tompkins, Vice-President and General Manager.

Known as Aristocrat block, this new construction material is created by a patented new process which combines marble chips, or other decorative aggregate, with plastic, and molds the combination to concrete block in an integral, permanent bond that can't separate. In appearance the block resembles granite.

With pre-finished Aristocrat block, a completely finished load-bearing wall can be erected in one operation, eliminating need for lathings, plastering and painting. Construction time, labor and material costs are reduced, and earlier occupancy is permitted. All this is accomplished without sacrifice in quality or appearance. In fact, according to Mr. Tompkins, Aristocrat block provides architects and builders with wide freedom of choice of color, texture and design.

The surface face on Aristocrat block is $\frac{1}{8}$ inch to $\frac{3}{8}$ inch in thickness, depending on the size of the marble chips used. Finished surfaces are cut and ground to close dimensional tolerances, assuring exact parallelism of surfaces.

Any size block unit, regardless of wall thickness, can be furnished with single face or double face, and end units either square or bullnose corners. Double faced block can be surfaced with inside and outside faces of contrasting texture and color, providing beauty, economy and utility.

Nine standard decorator colors of pink, blue, yellow, gray, green, oyster-shell green, oyster-shell white and dark base are available. All colors are permanent and special colors can be made on order.

Tests have proven Aristocrat block chemical and solvent resistant. Even strong cleaning solutions will not affect the color, texture, surface or durability of the block. It is fire resistant, will not support combustion and unaffected by weather changes from 40 degrees below zero to 200 degrees Fahrenheit. Aristocrat block also has a high impact resistance of 160 inch-pounds and its dimensional stability prevents slumping or warping.

Aristocrat block is made exclusively in central Indiana by Cinder Block and Material Company for distribution throughout most of the state.

Don F. Hunter Promoted At J. & L. Steel Warehouse

Don F. Hunter has been named manager of the Hollow Metal Dept., Engineer Sales Division, of the Holliday Steel Warehouse, Jones & Laughlin Steel Warehouse Division.



MR. HUNTER

Mr. Hunter, who has been with Holliday the past seven months, formerly was associated with the Stone Engineering Co., Indianapolis. He attended Broad Ripple High School and Butler University.

Married and the father of two children, he lives at 2310 West 66th St., Indianapolis.

Spickelmier Co. Plans 'Per-Fit' Window Expansion

Carl F. Spickelmier, president of Spickelmier Industries, Inc., announced today that Spickelmier Industries has expanded the operation of the "Per-Fit" Window Manufacturing Operation.

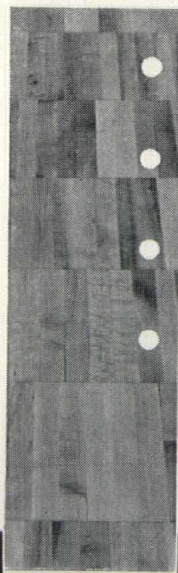
A reorganization within the company, designed to utilize the advantages of centralized management efficiencies, and the larger resources of both personnel and facilities of the Building Material Corporation, will result in the increase of its area of distribution and product line.

The "Per-Fit" brand name will be retained, and specifications and design standards will remain the same.

Two new economy "Per-Fit" Windows, recently developed, are now manufactured and will be ready for distribution by April 1, 1959.

FINE HARDWOOD FLOORS

EXPERTLY INSTALLED — FULLY GUARANTEED



● Ironbound* Continuous Strip*
Hard Maple

● PermaCushion* Resilient Floor
System

● Maple, Beech, Birch, Oak Strip
Flooring and unit blocks

● Available Dri-Vac treated with
Woodlife to resist moisture,
termites and fungi

*T.M. Reg. U.S. Pat. Off.

G. E. WEAVER CO., INC.

1147 Mishawaka Ave.

Ph. ATLantic 8-1458

South Bend 15, Indiana

Women's League Plans Annual Bosses Night

Tuesday, April 28, is the date set for the next regular meeting of the Women's Construction League of Indianapolis, Inc.

The occasion will be the League's Annual Bosses Night. Members will honor their bosses with an evening featuring dinner, refreshments, and entertainment. The affair will be held in the Construction League, 1456 N. Delaware Street.

Now in its fifth year, the WCLI takes an active part in several local charities and provides two scholarships for deserving girls, one in nursing and another in the business field.

Any women interested in joining the League may obtain full particulars from Rose E. Kendall, the League's honorary president, at WA 4-4533.

ONLY in the

INDIANA ARCHITECT

CAN YOU REACH

- ALL 702 Architects Registered by the State of Indiana

ALSO

- Registered Engineers
- State, County and Local Government Officials
- School Officials
- Bank Officials
- Hospital Administrators
- The Building Industry

For Advertising Rates:

INDIANA ARCHITECT

5930 Gladden Drive
Indianapolis 20, Ind.

OR CONSULT:

STANDARD, RATE & DATA,
BUSINESS PUBLICATIONS

C.S.I. Readies for Convention, Set for Chicago, May 4-6

J. Stewart Stein, partner in the architectural firm of Sobel and Stein, Chicago, and President of the Construction Specifications Institute, Inc., Washington, D. C., announced recently that he had named Warren R. Richardson, who is an executive with the firm of Ralph Stoetzel, Architect and Engineer, as Chairman of the Institute's Third National Convention Committee. The convention will be held at the Palmer House in Chicago, May 4, 5 and 6, 1959. Delegates will be sent to the convention by each of the Institute's thirty-nine chapters. C.S.I. membership is comprised of more than 3,000 specification writers representing architectural firms, consulting engineers and building material manufacturers throughout the United States.

Other members of the National Convention Committee are: Norvel Hill, Architect, Chagrin Falls, Ohio; Edwin D. Pairo of Chatelain, Gauger & Nolan, Washington, D. C.; Col. A. W. Sikes, Chicago Park District; Jack Spratt, Hillyard Co., St. Joseph, Mo.; Harry P. Hagedorn, City Testing and Inspection Bureau, Chicago; L. L. Gasey, Gasey Associates, Chicago; Harold V. Kelley, Aluminum Company of America, Chicago; and Fred Vergili, Friedman, Alschuler and Sincere, Chicago.

Warren Richardson, who is President of the Chicago Chapter, C.S.I., as well as Convention Committee Chairman, has appointed the following committee chairmen: Registration Committee: Walter Gibbon, Von Duprin Division, Vonnegut Hardware Co.; Exhibit Booths: Robert I. Geyer, Sika Chemical Corporation; Hotel: Harry Bevigani, Material Service Corp.; Specification Display: Andrew E. Digre, Shaw, Metz and Dolio; and Program: Paul Tiffin, Skidmore, Owings and Merrill.

Indiana Among Leaders In Fueloil Consumption

Indiana is among the leading states in the use of oil for home heating, with a total of 198,268 oil burner installations expected to consume more than 236,200,000 gallons of this fuel during the current heating season, according to the National Fueloil Council. This is an increase of 9,827 oil-equipped homes in the state in the past year.

Indiana, together with the eleven other Midwest states, has increased the entire region's total of home oil burners by 85,686 over last year, and the Midwest now consumes 3,017,070,000 gallons of fueloil annually. Indiana is an important and growing part of the oilheat market of the United States, which stretches across the colder, northern half of the country and where the most heat is required during the seven-to-nine months heating season.

American homes are the best heated in the world, according to the Council, for over 46

Architectural Research Is Two-Day Conference Topic

Problems and prospects of architectural research were the subject of a two-day working session by a specially invited group of prominent architects, social and environmental scientists and engineers meeting March 10 to March 12 at Ann Arbor, Michigan.

The conference was sponsored by The American Institute of Architects with a grant from the National Science Foundation.

"Architectural research is not only necessary now, it is ten years late in getting started," Herbert H. Swinburne, AIA, Philadelphia architect told the group. He proposed setting up a ten-man Research Study at one of the country's leading universities to coordinate architectural research and make research contracts for specific explorations with various universities.

"What we need and what The American Institute of Architects seeks is architectural research of which there is far too little as distinct from building research of which there is plenty," said Walter A. Taylor, AIA director of education and research.

"Architectural research is concerned with the social and life sciences and the reaction of humans to the manmade environment the architect creates. Building research is concerned with materials of construction and their assembly," Mr. Taylor explained.

Conference papers dealt with such varied subjects as psychology, sociology, environmental hygiene and planning, and structural research.

Conference chairmen were Walter E. Campbell, AIA, of Boston and Walter A. Taylor, Dr. Francis M. Kobayashi of the Division of Mathematical, Physical and Engineering Sciences of NSF summed up the aims of basic architectural research.

million of them have heating equipment and 24,028,000 of these have central-heating systems. Oil is the leader among the fuels used, supplying 44 per cent of the home heating energy, while gas supplies 33 per cent and coal 23 per cent. Nearly \$2,500,000,000 worth of oil is used annually to heat American homes.

In this state and others with a full season of chill days, the oil-heated homes are predominantly centrally heated—over 9 million of the more than 16 million American homes heated with oil have central heating, the Council reports. Gas leads in the more southern states where less rigorous winters can be met with non-central heating.

ARCHITECTS —

Plan Now To Attend Your First Annual Convention May 14, 15, and 16, Washington Hotel, Indianapolis, Indiana

School Fires . . .

(Continued From Page 11)

Exit Enclosure

The Building Exits Code requires that all stairways in school buildings be enclosed so that in case of fire the occupants can escape without danger from fire, smoke, fumes and resulting panic. The stairways in Our Lady of the Angels School were open except the two in the front of the north wing. These stairs were enclosed at the second story level by substandard doors which were blocked open at the time of the fire.

Exit Capacity

The 9½ units of exit width from the second story of this building were sufficient to permit 570 people to reach the ground in 1 minute and 20 seconds, according to exit capacity requirements set forth in the Building Exits Code and elsewhere. It is conservatively estimated that there were 610 people on the second floor of the building when the fire occurred. A closer examination of the distribution of exit capacity shows a striking contrast between the exit provisions for the north wing as opposed to those for the rest of the building.

In the north wing, the seven exit units were more than adequate in capacity to handle the 329 people on the second floor. In the annex and south wing, however, there were only 2½ exit units available to accommodate the 281 people believed to be on the second floors of these two sections. Two-and-one-half units of exit width are adequate to evacuate only 150 people in 1 minute and 20 seconds. The inability of the 2½ exit units to handle the 281 people in the prescribed time was demonstrated by the fact that the average time for the evacuation of the second floor in eight exit drills in 1958 was slightly more than three minutes. Had additional exit capacity been provided to accommodate the excessively high population density in the annex and south wing through erection of stair towers, slide escapes or fire escape stairs accessible from individual rooms the occupants of the second stories of these two sections could have reached the ground without having to pass through smoke-filled corridors and stairways.

As demonstrated by the loss of life in the north wing, however, adequate exit capacity is not the only consideration, or even the most important consideration, when evaluating the adequacy of exits. Of primary importance is the enclosure of exits to assure that the ways out of the building will be free of smoke and heat when needed.

Two Ways Out

Since there is always a possibility that fire or smoke may prevent the use of one exit, at least one alternate exit must be provided, remote from the first. Because of the fact that the three stairways from the second floor corridor of the north wing of Our Lady of the Angels School were all connected through the common corridor, the pupils in

the second story classrooms had in reality no safe way out. The simple expediency of enclosing the three stairwells at the second story landings would have corrected this situation. The requirement for two exits could also have been met by erecting stair towers, slide escapes or fire escape stairs accessible from individual rooms.

Sprinklers and Exits

There is no question that if a complete, properly installed and adequately maintained automatic sprinkler system had been in Our Lady of the Angels School the fire at the base of the stairwell would have been quickly extinguished before smoke of any consequence had penetrated the upper story. It is, however, questionable practice to rely on fire extinguishment to the neglect of exits because of the possibility of both human and mechanical failure. Automatic sprinklers and stairway enclosures complement each other and both should have been installed in this school.

In existing buildings that lack enclosed exits and where it may be impractical or too expensive to enclose them, the Building Exits Code suggests the following substitute. The school building can be occupied safely if both 1) it is equipped with a standard automatic sprinkler system, and 2) if there is a standard exit of sufficient capacity from each room so that the occupants can escape without passing through any corridor which could be blocked by smoke, heat or fire. This condition may be met in various ways, such as providing doors leading directly outside from first floor rooms and by direct access to fire escape balconies from every room on upper floors.

Smoke Vents in Stairways

In the absence of an automatic smoke vent at the top of the stairwell where the fire started, all products of combustion from the fire in the stairwell were forced into the second story corridor. The presence of a vent would have reduced considerably the amount of smoke and hot fire gases that entered the corridor. A smoke vent, however, is not a substitute for proper stairway enclosures. It should be used in conjunction with such enclosures.

Interior Finish

It is generally recognized that in the interest of life safety in schools interior finish should be noncombustible (Class A, flame spread 0-20) or at least slow burning (Class B, flame spread 20-75). The Building Exits Code, however, allows up to 10 per cent of the aggregate area of walls and ceilings of corridors and exitways to have a combustible Class C rating (flame spread 75-200). No interior finish with a higher flame spread rating is permitted. The wood trim in the second story corridor of the north wing with a Class C flame spread rating, represented about 17.5 per cent of the aggregate corridor area.

There is a difference of opinion as to whether or not the ceiling of the second

story corridor was finished with combustible cellulose fiber acoustical tile. A finish of this material would increase by 23 per cent the aggregate corridor area with Class C (tile with flame retardant coating on exposed surface) or Class D (untreated tile). Because of the open stairways and the large amount of other combustible material present, the results of this fire can be satisfactorily explained without the presence of a combustible ceiling finish.

The ceilings of all classrooms in the second story of the north wing were finished with combustible cellulose fiber acoustical tile.

It is important to recognize the fact that even if this building had been of fire-resistive construction the results of this fire would have been similar because of the combustible material available at the bottom of the stairway, the absence of doors at the top of the stairway, and the combustible interior finish.

Detection

As again clearly demonstrated by this fire, the fact that a building is populated is no guarantee that a fire will be discovered promptly.

A complete automatic sprinkler system would have detected and extinguished the fire in its incipency. An automatic fire detection system installed throughout the school would probably have discovered the fire before the second story corridor became impassable. Automatic protection in itself, however, is not a substitute for properly enclosed stairways. It is desirable supplementary protection.

In Case of Fire

It is a cardinal rule of life safety that at the first indication of fire (which is usually smoke) all occupants of the building and the fire department should be alerted simultaneously. From the time the teacher of Room 206 was first told that there was smoke in the building until she operated the building fire alarm, it is estimated that 13 minutes elapsed. Her actions during this vital period clearly indicate that adequate steps had not been taken at this school to assure proper emergency action by the teachers in case of fire, nor had a sufficient number of building fire alarm controls been provided.

Had the building fire alarm been rung when the fire was first discovered it is probable that the second story corridor of the north wing would still have been passable.

The alarm system at this school was not connected to the fire department alarm headquarters, and no one in the school telephoned the fire department.

Interior Alarms

The substandard condition of the manual fire alarm system in the school should be noted. The alarm sending switches were not readily accessible to most of the occupants of the building, they were only two in number and were not distinguishable from ordi-

(Continued on Page 20)

With Holland Firm

Two of the world's foremost timber laminating companies have joined in an agreement which grants to each firm exclusive rights to the other's manufacturing processes, machinery and equipment.

The announcement was made this week by M. C. Hanisch, Jr., president of Unit Structures, Inc., of Peshtigo, Wisconsin, one of the principals. A similar announcement is being made at this time by H. Ernst Deleth, president of the N.V. Nemaho Company of Doetinchem, Holland, the other principal.

The two companies will also exchange technical, engineering and research information.

Arrangements for the working agreement were resolved last September when Hanisch visited Holland as part of a six-week tour of European laminating companies.

Engineering and production personnel of Unit Structures and Nemaho will exchange visits in the near future to co-ordinate projects and mutual interest.

The working agreement establishes the basis for joint enterprises outside the United States.

The Nemaho Company was founded in 1918 by German inventor Otto Hetzer, who invented the glue laminating process in 1906. The present management acquired the facilities in 1934.

Unit Structures, Inc., was founded by the late M. C. Hanisch, Sr., who once was employed by Hetzer as an architectural engineer. Hanisch came to the United States following World War I and settled his family in northern Wisconsin. He envisioned a great potential market in America for Hetzer's glued laminated construction. Unit Structures was organized in 1934 with the help of Peter Thompson, a founder of the Thompson Brothers Boat Manufacturing Company of Peshtigo, Wisconsin.

After several expansions of its Peshtigo facilities, Unit built a second plant at Magnolia, Arkansas, near some of the nation's finest stands of Southern Pine which is used almost exclusively by Unit because of its bending quality, high strength and facility for finishing in any stain or color.

Moving Soon?

Send your change of address to the INDIANA ARCHITECT, 5930 Gladden Drive, Indianapolis 20, Indiana, before you move. And please be sure to include your postal zone number if you have one.

Allow one month for change of address to be processed.

School Fires . . .

(Continued From Page 19)

nary light switches. Had readily identifiable fire alarm stations been distributed throughout the building it is likely that at least one of the people who first noticed smoke would have operated the building alarm system many minutes sooner.

Exterior Alarms

According to the present Municipal Code of Chicago and the recognized standard for the installation of public fire alarm boxes, all schools should have a fire alarm box at or near the entrance. Had a box been so located at Our Lady of the Angels School it is probable that the first alarm would have been transmitted to the fire department by the passerby at least one or two minutes earlier. Furthermore, the box alarm would have resulted in response of a box alarm assignment on the first notification of the fire. This would have brought three additional engine companies and one additional ladder company to the scene three or four critical minutes earlier.

The NFPA Building Exits Code recommends that any building fire alarm system be arranged so that when operated to alert occupants of the building it will simultaneously transmit an alarm to the fire department. Automatic sprinkler systems and automatic detection systems should be arranged to operate building and fire department alarm systems simultaneously.

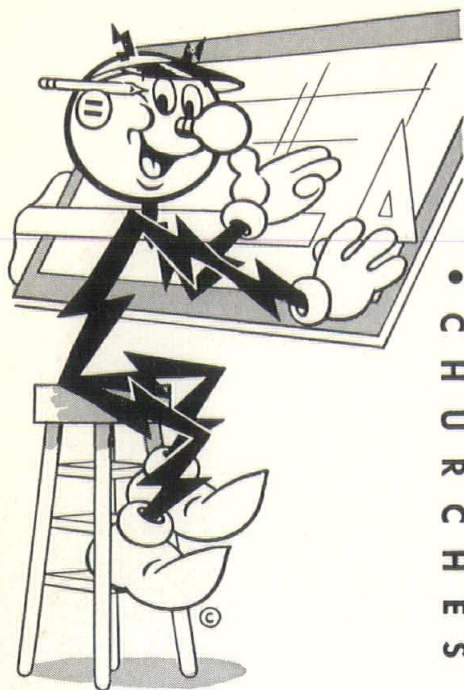
Housekeeping

Following the fire the remains of a large amount of combustible material (bundled newspapers, exam papers, etc.) was found among the debris at the base of the stairwell where the fire started. The school authorities stated that combustible material was not supposed to be accumulated in this area. At the base of and under each of the two front stairwells, however, there was a wooden storage closet in which wooden chairs, screen panels and other combustible materials were stored; and a former pupil of the school stated that in 1957 newspapers from a paper drive were stored at the foot of the rear stairway. Good housekeeping is thus again emphasized as a cardinal fire safety principle.

Summary

The ninety-three deaths in this fire are an indictment of those in authority who have failed to recognize their life safety obligations in housing children in structures which are "fire traps." Schools that lack adequate exit facilities and approved types of automatic sprinkler or detection equipment, and which possess excessive amounts of highly combustible interior finish, substandard fire alerting means and poor housekeeping conditions must be rated as "fire traps." School and fire authorities must take affirmative actions to rid their communities of such blights.

THE INDIANA ARCHITECT



**Make the Buildings
You Design
Truly Modern—**

SPECIFY ELECTRIC HEATING

Clean • Safe • Flexible

Check with your electric heating contractor, or your nearest office of

**PUBLIC SERVICE
COMPANY OF INDIANA, INC.**

Good, Low-Cost Electric Service to More Than 700 Communities in 70 Counties in Indiana

Library Cl



AMERICAN INSTITUTE
OF
ARCHITECTS


MAY 8 1959

LIBRARY

Indiana architect

AA

APRIL, 1959



**FOR
BASKETBALL
IN INDIANA—
NOTHING BUT
THE
BEST**

20,600 sq. ft. Ironbound floor over $\frac{1}{2}$ " corkboard in Penn Township High School, Mishawaka, Ind. Architect: Cole & Son, South Bend. Gen'l Contr: H. G. Christman Constr. Co., South Bend.

IRONBOUND* CONTINUOUS STRIP* HARD MAPLE FLOOR

Just about everybody knows that anything having to do with Indiana basketball is absolutely top-flight, A-1 — without question, the very best. Players, coaches — and fans — just don't come any better than the kind we have in Indiana.

That goes for floors, too. That's why the new Penn Township High School, like so many others in Indiana, has the finest mastic-set gymnasium floor made — an Ironbound Continuous Strip Hard Maple Floor.

Indiana coaches and players agree Ironbound is the finest playing surface made; its excellent natural

resiliency prevents shin splints, sore ankles and leg muscles, keeps players at their best. Basketball fans — the people who pay for the floor — and school officials agree Ironbound really gives them their money's worth, too, because, besides the improved play, Ironbound's ability to hold up under generations of jumping feet provides unmatched long run economy.

Next time you're planning an Indiana gym, choose the only mastic-set floor good enough for our "state game" — Ironbound Continuous Strip Hard Maple Floor.

*T.M. Reg. U.S. Pat. Off.

G. E. WEAVER CO., INC.

1147 Mishawaka Ave., South Bend 15, Ind.
Ph. ATLantic 8-1458

FRANCHISED INSTALLER OF IRONBOUND CONTINUOUS STRIP HARD MAPLE FLOORS, PERMA CUSHION FLOOR SYSTEMS AND OTHER HARDWOOD FLOORS