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Consulting Engineer: Landauer, Guerrero & Shafer
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Diagrammatic ceiling view of offices on preceding page. This shows the installation of five Anemostat HPCM-1-100 High Velocity units, each supplying 125 cfm.

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during the state convention
October 21 and 22
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Greetings...

President Darrell

To all members of the three state chapters of the American Institute of Architects, to members of the Professional Engineering Societies, Producers’ Council, Associated General Contractors, Builders Exchanges, to our subcontractors and equipment, specialty and building material dealers.

For years the state chapters of the institute have held state conventions under the direction of the Minnesota Society of Architects and have had for their abstract objective the planning of buildings and structures which, when completed, will not only serve the purposes for which they are designed but will also present a pleasant and harmonious appearance. However, the actual accomplishment of the construction of these projects requires the effort, direction and coordination of scores of persons in different types of arts, professions, skills, trades with devices and appliances in addition to the purely technical architectural service.

Our 1955 state convention has been planned to give a greater emphasis upon these related arts, sciences and abilities and to aid and assist in the interchange of idea development and means for better coordination and cooperation among all interested groups engaged in building construction. We have increased exhibits, added seminars and have invited members of allied industries to attend these sessions. The program also includes art, architecture and related subjects and an evening of entertainment, dancing, fun and frolic on Friday night to which our guests as well as our members are invited. The program is listed elsewhere in our magazine. It will all be over before kick-off time for the football game the Saturday following.

See you at the convention!

George C. Darrell
President, Minnesota Society of Architects.
Community Planning Seminars
Will Be Features of

MINNESOTA SOCIETY
CONVENTION

WITH a handful of drawing cards to entice members and associates to the convention, the annual gathering of the Minnesota Society of Architects scheduled for St. Paul on October 21 and 22 promises to be another stand-out event on the 1955 calendar. The program will be jammed with business sessions during which experts in the building industry will speak or conduct seminars dealing with the latest problems.

President George Darrell of the state society will conduct the two days of meetings, which are scheduled to get underway shortly after registration starts at 9:00 a.m., on Friday, October 21. The convention’s business foundation is unique this year in that the setup was incorporated, a move taken on suggestion of the society’s executive secretary, Robert E. Howe heads the convention organization as president, Milton Bergstedt is vice-president, Ralph Keyes secretary, Burt Fasth treasurer, and Burton Flick, Warren Mossman and W. Brooks Gavlin directors.

The opening business session will be at 10:00 a.m., Friday. After presentation of the opening remarks President Darrell will welcome the conventioners and keynote the sessions.

The first seminar of the convention will be that on the Bloomington City Plan, presided over by Kenneth Peterson of the office of Francis Kerr. Following this seminar there will be an open period during which those attending can visit the booth exhibits of new products, equipment, methods, etc., held in conjunction with the business sessions and the displays of architects’ work.

The Friday luncheon speaker will be Eldon Winkler, head of the St. Paul Arts and Science Center, who will discuss his work as it bears upon the major field of architecture and construction. The lunch is to be in the Casino Room of the St. Paul Hotel, convention headquarters.

Following luncheon the seminar on the Southdale Project, which has received so much publicity and is of such wide general interest, will be held. The session starts at 2:00 p.m., and the project will be presented by representatives of the office of Victor Gruen. They will trace the history of the project, outline many of the design and construction problems met and solved and in every way answer the many questions architects will have about the suburban Minneapolis project. The group will have on hand models and drawings as well as other data for study by those attending the seminar.

Following a recess there will be a panel discussion on co-ordination among architects, contractors and suppliers. Accent will be on specifications and the ways in which they can be simplified and the manner in which they must be tightened up so that the three major principals in erection of a building can see the same data in the same light. The panel will include representatives of architects for design, equipment and material suppliers for the supply angle and contractors for actual construction. It should develop a great deal

AREA ARCHITECTS—TAKE A BOW!

Architects of this area can take a bow for the plaudits of their work by a New Yorker who was here for the AIA convention in Minneapolis. On his return home he wrote to some friends in California and our former staff member, W. G. Purcell, picked up the letter and sent part of it along to us. We are proud of what was said and, although the names are not available in full, this is what the New York architect told Shirley and Dick in California:

"Just got in town this morning from the best part of a week in Minneapolis. You both should see it. What they are doing in architecture is tremendously exciting. Not only in public buildings such as churches and schools, but in homes too. And modern surrounded by modern, with daring use of colors. Well, it just must be seen! Barring war or other disaster which would require general reconstruction, it is my feeling that the rest of the country will need at least 50 years to reach the point where they are today . . ."

Thank you, New York! We are proud of your visit’s results.
Minnesota Society of Architects

1955 Convention—St. Paul, Minn.
October 21 and 22, 1955

Tentative Program

FRIDAY, OCTOBER 21, 1955

9:00 a.m.—Registration.

10:00 a.m.—Opening business session—
  Presentation of Convention to President.
  Acceptance and Welcome by President.

10:15 a.m.—Seminar—Bloomington City Plan.
  The seminar will be conducted by Kenneth Peterson of the office of
  Francis Kerr (successor to McClure & Kerr).

11:15 a.m.—View product exhibits.

12:00 Noon—Lunch—Casino Room, St. Paul Hotel.
  Speaker—Eldon Winkler, head of St. Paul Arts & Science Center.
  Price—$2.75.

2:00 p.m.—Seminar—Southdale Project.
  This project will be presented by representatives of the office of Victor
  Gruen using models, charts and diagrams of the project.

3:00 p.m.—Recess.

4:00 p.m.—Panel discussion on co-ordination among architect, contractor and building material
  and equipment supplier, with emphasis on specifications. Representatives
  of material suppliers, an architect and a contractor on panel. Discussion
  from floor.

6:30 p.m.—Dinner Dance.
  Ballroom, Hotel Lowry.

8:15 p.m.—Skit—“Chameleon or Out on a Limb” (with apologies to the Lizard Family) as con-
  cepted by Gerald Stanwell. All Star Cast!

9:00 p.m.—Dancing until midnight. Music by the orchestra of Joe Brabec.

SATURDAY, OCTOBER 22, 1955

9:00 a.m.—Business Session—
  Reports of committees.
  Resolutions.
  General Business of Society.
  Announcement of Elections.
  Presentation of New Officers.
  Adjournment.
of interest and some definite answers to some problems.

Friday evening there is to be a dinner dance in the ballroom of the Hotel Lowry. Following the banquet a skit entitled "Chameleons or Out on a Limb (with Apologies to the Lizard Family)" will be presented. The skit reportedly was concocted by Gerald Stanwell and will be presented by "An All-star Cast." It hints on some high hilarity. After the fun dies down those who wish can dance to the tunes of Joe Brabec's orchestra until midnight.

Saturday's business session opens at 9:00 a.m., with the reports of committees. Then action on resolutions will be taken, followed by the general business of the convention. Windup comes with the announcement of the elections and presentation of the new officers. Adjournment will be in time for luncheon and any football or other plans those at the convention may have made.

While their menfolk are tending to their architectural knitting the ladies at the convention will be given a well-filled schedule. The plans made for the distaff events are given in another story in this issue.

This year's convention rides the top of an architectural wave which has no parallel in history and attendance should be excellent, meeting planners said. This convention, as a "post-graduate course" to the big AIA convention in Minneapolis in June, promises to bring into focus the problems of the state builders as they are different from those on the national level and this will balance off the year's big events for our state's architects.

The current business session of the group on Saturday should bring to the fore many society problems which need ironing out. Past conventions indicate the trends of action and the cooperation of every society member is needed, officials pointed out, to make the decisions made for the year 1955-56 representative of the thinking of the entire membership so putting the decisions into effect will be generally acceptable.

The seminars scheduled are of wide interest. During the past several years the seminars have become increasingly popular as they present many facets of the problems under consideration and also give architects other than those actually on the panel a chance to have their say about the subjects. Many architects particularly enjoy these sessions because they can get their problems threshed out by experts in a number of fields of related work and take home definite answers to be used in their future or on-the-board works.

Exhibits this year will be of two kinds. Architects' drawings, specifications, models, etc., will form one group. Another showing will include products and equipment, giving the architects a chance to study the latest techniques and building materials for possible incorporation into their works.

The complete, though necessarily tentative and subject to change, program is printed elsewhere in this issue of the magazine.

Theme Localizes AIA—
"Designing for the Community"

The Minnesota Society of Architects, in planning the professional aspects of its annual convention, has taken the theme of the AIA June convention—"Designing for the Community"—and implemented it with specific examples of community planning within the State of Minnesota.

Representatives of the office of Victor Gruen, who has gained distinction in community planning, will present a discussion of their Southdale project. They will have with them models and diagrams used in planning the project. The Southdale idea is an interesting one—attempting by the elements incorporated in the plan to make the project in effect the center of community function and activity.

The Bloomington City plan is of different aspect, being a plan for a whole city or urban development. The unusual feature of the plan is that it is a plan for a town in being, thus having to use features of the community in existence rather than having the freedom to develop the plan unencumbered by existing conditions and usages. The plan was originally conceived and executed by Harlan McClure, formerly of the University of Minnesota School of Architecture and now head of the school at Clemson. Mr. McClure, who has studied extensively in community planning, was selected by the village council of Bloomington to submit a plan in answer to a public demand for a planned development of the suburban community. The seminar will be conducted by Kenneth Peterson, who was one of the student assistants to Mr. McClure in collecting and co-ordinating data. Mr. Peterson will be using a scale model of Bloomington as well as zoning, traffic circulation and nuisance factor maps and studies of age and condition of structures in the area. He will use slides to illustrate his talk.

LADIES ACTIVITIES

While the men of the Minnesota Society of Architects are busy attending business sessions, seminars and viewing the product exhibits, the ladies of the Society Auxiliary will have their annual meeting and election of officers.

The ladies have scheduled a luncheon to be held at 1:00 p.m. in the University Club on Friday. Mrs. Arthur A. Stewart, St. Paul, will review the play "Tea House of the August Moon," a current Broadway hit. Mrs. Edwin H. Lundie, president of the auxiliary, will preside at the business session. Other officers are Mrs. Austin Lange, vice-president and a candidate for the
of the construction industry at record levels, H. E. Foreman of Washington, D. C., managing director of the Associated General Contractors of America, said in Minneapolis on September 28 in his report to the governing and advisory boards of the AGC. The volume of new construction for the first eight months of this year was 13 per cent ahead of the same period last year, Mr. Foreman said. For the full year the volume of new construction is expected to approach $42,000,000,000 about $4,000,000,000 more than the record level reached in 1954. The total volume of construction activity, including maintenance and repair, will amount to about $58,000,000,000 this year, according to the report.

"While new economic records have been established this year for the gross national product, for personal and disposable personal income, consumer spending, employment and industrial production, the increase of construction this year over last year exceeds the increase of all other major industries," Mr. Foreman told the AGC boards. "Construction has been a powerful force in the nation's economic activity. It accounts for more than one-seventh of the gross national product."

Many studies indicate bright long-range prospects for the construction industry, he said. As an example, he cited a recent joint survey by the Departments of Commerce and Labor which placed state and local public works needs at $200,000,000,000 during the next 10 years.

"The head of the New York Stock Exchange has predicted that industry will need to spend $375,000,000,000 by 1965 to keep abreast of the demands of a growing economy," he continued. "The Twentieth Century Fund in its latest survey of America's resources and needs anticipates higher and higher construction levels for at least the next five years. The urban renewal program already represents a billion-dollar-a-year potential, and estimates of requirements to eliminate city blight run as high as $10,000,000,000 for 10 years."

Building highway and heavy engineering activities are all showing increases, Mr. Foreman reported. Government estimates place private building construction 22 per cent higher this year than in 1954, while public building activities are 7 per cent greater. Highway construction is expected to exceed last year's volume by 20 per cent "and the nation is on the threshold of its greatest highway program." Both public and private expenditures for heavy engineering construction are expected to show increases. Industrial construction is up 8 per cent, public utilities 4 per cent, military facilities and sewer and water works 12 per cent, while the only decline is in conservation and development programs, which are down about 8 per cent.

The AGC official said construction materials generally are in adequate supply, although deliveries of cement and steel have slowed down in some areas due to the record level of activity in construction and in the entire economy. Additional expansion programs have been announced by the cement and steel industries.

The three-day AGC midyear board meeting attracted some 400 construction leaders from all parts of the country. They represented more than 6,400 member firms of the AGC which annually perform more than 80 per cent of all contract construction in the United States and a large amount of work overseas as well. Besides officers, board members and national staff members, officials of 124 AGC chapters and branches in the United States and Alaska were at the meetings.

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The AGC officials said the construction industry is the nation's 

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AGC members of the national AIA-AGC Joint Co-operative Committee are shown as they met in connection with the midyear meeting. Seated, left to right, are C. S. Embrey, assistant executive director, AGC of America; P.D. Christian, Jr., Atlanta: Frank F. Burrows, Belmont, Cal., AGC committee chairman: Robert W. Long, Kansas City; John J. Testman, Albuquerque, N. M.; and standing are Welton A. Snow, manager, AGC Building Division, and John K. Bowersox, AGC assistant.

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ST. PAUL LADIES PLAN EXCURSION

The St. Paul Chapter of the Women's Auxiliary is planning an excursion to Red Wing, Minnesota, on October 19, to visit the Red Wing Potteries and the S. B. Foot Tanning Company. The group will leave by chartered bus at 10:00 a.m., and return at 5:00 p.m. Lunch for the ladies will be served at the St. James Hotel. Mrs. Earl Wishy is in charge of arrangements.

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Record Volume Will Continue in Construction Field, Says AGC Chief

Both immediate and long-range prospects are for a continued volume of construction at record levels, H. E. Foreman of Washington, D. C., managing director of the Associated General Contractors of America, said in Minneapolis on September 28 in his report to the governing and advisory boards of the AGC. The volume of new construction for the first eight months of this year was 13 per cent ahead of the same period last year, Mr. Foreman said. For the full year the volume of new construction is expected to approach $42,000,000,000 about $4,000,000,000 more than the record level reached in 1954. The total volume of construction activity, including maintenance and repair, will amount to about $58,000,000,000 this year, according to the report.

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ARCHITECT
IN one of the more interesting architectural designs of recent date, Architect Harlan McClure has developed an unusual contemporary home for a beautiful lakeside setting. A disciplined, rectangular plan was employed, with the gable ends of the roof placed across the long dimension of the plan. This roof scheme offered excellent fenestration possibilities and the architect has done a remarkable job with continuous angle-head windows under the long sweep of the roof. The entire lake façade is of glass, so that every major area commands a beautiful view of the lake and western sky. The ever-changing panorama of the lake has been made a part of daily living in this home. Nature's out-of-doors provided much of the decorating function in this home where entire walls are of glass and the pageant of the seasons is on continuous display for the owners, from the quiet beauty of a summer sunset over the lake to the fierceness of a gathering storm.

A formal terrace shielded by a tall redwood divider of semi-opaque design provides a distinctive motif on the eastern side. The entrance foyer adjoining the terrace carries the formal note into the interior by means of a pair of doors, balanced geometrically with the adjacent window areas. Here again the architect has separated the entrance foyer and the generously scaled formal patio with continuous sheets of sealed double glazing.

The house is strictly modular in design, being laid out on a four-foot module which is used throughout. The four-foot grid is superimposed on the plans to provide a dimensional system which is easily and accurately readable. Deviations from the module are dimensioned to the nearest grid line; no further dimensions are needed, as each grid line carries its own dimension as a multiple of four feet.

The architect chose the post-and-beam system for the structure, as it lent itself well to the huge glass areas and the beamed, sloping ceiling. The posts are pipe columns and the beams are of laminated wood. The supporting columns are located on the intersection of the module grid lines almost without exception. Masonry, which is painted, vertical-joint concrete block, plays a prominent part in the design. Conventional stud construction is used for a small portion of the structure.

The house is of the split-level type, with the bedrooms located over the garage. The lofty, sloping ceiling with its laminated beams and wood paneling is visible throughout the house. The living area is on a lower level than the bedrooms, which creates a high, vaulted ceiling effect over the entire living area, with a resultant contribution toward spaciousness.

LOCATION: Lake Minnetonka, Minn.
CONTRACTOR: Dysart and Pehling
PLUMBING: Hopkins Plumbing and Heating Co.
HEATING: Plehal Heating Co.
ELECTRICAL: Mergens Electric, Inc.
CEMENT CONTRACTOR: J. P. Lundquist
MILLWORK and FENESTRATION: A. T. Rydell, Inc.
A RESIDENCE

by

HARLAN McClURE, A.I.A.
The philosophy of this house

by Harlan McClure, Architect

Function: Situated on a lakeside lot with large oak trees and a fine view, the basic problem was to provide accommodation for both formal and informal living activities for a family with two small sons. All major living spaces enjoy the lake view. Especially desired was an ample living area. The plan is open, although there is a separate dining room, kitchen and bar. The approach terrace on the side away from the lake provides a formal outdoor area. The terraces on the lake side were planned for informal living.

Structure: The house is designed on a four-foot module. Structural beams are laminated wood on eight-foot centers, with Timdeck planking providing secondary members and ceiling finish. Masonry is painted concrete block, with stacked joints.

Aesthetics: The split-level plan is accomplished within a rectangular discipline.
CONSTRUCTION NOTES:

GLASS: All angle-head windows and fixed glass are 1" Twindow insulating glass. All ventilating sash are ½" Thermopane insulating glass.

STAIRWAYS: The stairways are open to the hall and foyer and are constructed without risers. A simple wrought-iron railing is secured to the carriage with small lag screws.

ENTRANCE: A pair of doors of large glass area, with matching screen doors on the exterior, provide extra ventilation and are spatially appropriate to this formal entrance.

PANELING: Pecky Cypress paneling is used effectively in the entrance foyer and elsewhere in the home.

HEATING: Three separate Janitrol furnaces are used to heat this home by forced hot air. Each furnace is separately controlled by its own thermostat, providing an effective three-zone system.
The Selection of the Window System

Because of the importance of the window motif in the over-all scheme, the selection of the window system was of the utmost importance to the architect. Several rigid requirements were imposed. First, a window conforming to the concise modular system as dictated by the four-foot module was mandatory. Second, a window system flexible enough to allow the use of angle-head units was required; this was a basic precept of the original plan. Third, sealed double glazing was specified in both the operating and the fixed glass. And fourth, the hardware used must be in keeping with the general elegance of the house.

The architect specified the Versa-Lite window system, manufactured by A. T. Rydell, Inc., Minneapolis, for this residence. The Series 1 modular Versa-Lite coordinates perfectly with the four-foot module, allowing space between adjacent units for a 2½" pipe column. The Versa-Lite system allows the use of angle-head windows within the scope of standard construction. The complete Thermopane glazing and satin dull bronze hardware fulfilled the other requirements. In addition, the flexibility of the system is well suited for coordinating custom-built exterior frames with standard units. In most cases, standard Versa-Lite frame parts were utilized for constructing custom-built frames, with a resulting saving.

Mr. McClure used Rydell's unique drafting service to the fullest extent in designing this residence. Once any Rydell product has been specified, this service produces all required shop drawings for approval of the architect and installation drawings for on-the-job use at no extra charge. In planning this home, the architect first consulted with the drafting department at Rydell's to determine the most suitable Versa-Lite combinations to produce the desired effect. Rydell's designers then took over the detailing of the various adaptations of the Versa-Lite, the detailing of the necessary custom-built units, the coordination of adjacent door and window areas and the production of the final shop drawings which faithfully executed the architect's working drawings. Many hours of tedious custom detailing were saved the architect on this home, not only in his specifying a standard product, but in his selection of a firm whose facilities include drafting services and custom millwork manufacture as well.

(Advertisement)
Have a beautiful view from the living room.
New Building on Minnesota Campus Arouses Interest

One of the most interesting buildings on the main campus of the University of Minnesota is the new Jewish student center at B'nai B'rith Hillel Foundation, designed by Ellerbe and Company of St. Paul and Rochester. Its stimulating design outside and inside expresses the social and religious nature of the center and its furnishings complement the fresh architectural approach. Though relatively small (two stories high and 51 by 125 feet), the structure has three functional floors and provides complete facilities, even to a photographic darkroom.

The religious character of the building is expressed externally in a curved façade of gray-buff brick laid in the six-pointed star pattern of Hebrew tradition. This masonry comprises half of the front elevation and also serves as the inner wall of the chapel. The remainder of the front elevation is glass and aluminum, enriched with panels of Italian mosaic work at the second floor and along the top of the building.

Inviting warmth and informality are achieved with a recessed main entrance well back from the sidewalk and a paved area between that will have ornamental plantings. The main floor foyer and general lounge gain an effect of airy spaciousness with a 20-foot ceiling and a mezzanine gallery.

Materials throughout were chosen for minimum maintenance. The frame of the building is a combination of steel bar joist and reinforced concrete. Exterior...
materials are architectural concrete, stucco and ornamental brick. The backup wall is concrete block. There are extensive glass areas set in aluminum sash. Interior materials are oak paneling, ornamental brick and plaster painted in bold, clear colors.

Most of the rooms and all corridors are sound-conditioned. The acoustic treatment consists of a half-inch thickness of vermiculite acoustical plastic applied over a base coat of plaster on metal lath. The finish coat is the new machine-applied texture finish and is reported to be one of the most beautiful acoustic jobs in the Twin Cities.

Interior spaces are remarkably flexible. To the right of the general lounge on the main floor are the chapel, an assembly room and an auditorium with a stage. Folding partitions at each end of the assembly room make it expandible into both the chapel and the auditorium. Normally, both partitions will be closed, dividing the space into three parts.

Extending down the left side behind an oak-paneled partition are a coat and check room, an office for planning student activities, a storage room for folding chairs and tables and a pantry for use when refreshments are served on the auditorium level.

The ground floor, or basement, is divided into four main areas. On the right at the foot of the stairs is a recreation room, in back of it a cafeteria. These two rooms also expand into each other by means of a folding partition. On the left side are a powder room, toilets for men and women and mechanical equipment rooms. Across the rear is a tiled kitchen. The ground floor has excellent natural light, since windows are above grade.

The second floor houses the library, a large meeting room with a folding door that divides it into two rooms which can be used for seminars, a music room for the enjoyment of records and a hobby room with a photographic darkroom. In addition there are clerical offices and file space, a mimeograph room, an office for Rabbi Louis Milgrom and apartments for caretakers.

Curving plastered partitions on the main and ground floors give visual pleasure as a striking contour and serve a practical purpose also. On the main floor the partition fans out the rear of the auditorium to a desirable wedge shape. On the ground floor it narrows the space at the cafeteria line where students will file by to be served and widens the area provided for tables.

Focal point of the chapel is the Ark, mounted slightly away from the curved brick wall which repeats the Star of David pattern. Thirty feet high, the chapel is dramatically illuminated by a vertical glass panel of clear, bluish glass alternating with panes of frosted white set in wide aluminum mullions. Hand-woven tapestry and fabrics will adorn the walls and window. The oak pews can seat 80.

Combined seating capacity of the assembly room and auditorium is 200. The auditorium will have a few game tables and lounge-type units that will seat 18 or 20 for everyday use. A hooded hearth with a curved rear wall creates a pleasant and intimate atmosphere and opens the corridor space at the entrance to the auditorium.

The recreation room on the ground floor will be furnished with ping pong tables and other games. The cafeteria can seat 110 at restaurant-type tables and considerably more when folding tables are set up.

On the second floor, the library is equipped with study tables which will accommodate 16 students. Comfortable reading chairs will be provided in addition. Each of the seminar rooms can seat 16.

The building is heated by a two-pipe vacuum steam system with wall fin-type radiation and convectors. The boiler is gas fired.

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LUTHER NAMED ASSISTANT TO LAYNE-MINNESOTA PRESIDENT

Verne Luther, St. Paul, has been named assistant to the president by Lee Rogers, president of Layne-Minnesota Company, the well drilling, water treating and turbine pumps concern of Minneapolis.

Mr. Luther joined the Layne organization in 1948 as a contracting engineer after spending two years at Iowa State College in Ames and two years at Morningside College in Sioux City where he received his bachelor of science degree.

During the past seven years he has handled major Layne well drilling and water treating projects for industrial concerns, municipalities and the federal government in various parts of Minnesota, North Dakota, South Dakota and Montana. During World War II he served as a navy fighter pilot in both Atlantic and Pacific theaters and was discharged in 1945.

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ERRATA

In the NORTHWEST ARCHITECT’s last issue there was an error in the credits of the article on manufactured light versus daylight. Authors of the article should have been Richard Hammel and Lawrence E. Johnson. The article was a paper presented at the National Technical Conference of the Illuminating Engineers Society in Cleveland, September 12-16, 1955 and was reprinted through the courtesy of the authors.
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Northwest
When architect HARLAN McCLURE set out to design this house, he required a window system which would fulfill the following requirements:

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- A modular window to fit the four-foot module of the design.
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- Send staff to Red Cross courses. They may save your life.
- Promote preparedness in your community. Your local CD Director can show you how.

Set the standard of preparedness in your plant city—check off these four simple points NOW.
Children's Specialty Center, Shops and Clinic for a Typical Suburban Community

An Undergraduate Thesis Submitted by Thomas H. Hodne, Sr., to University of Minnesota School of Architecture, June, 1955.

PREMISE

With the rapid growth of the suburbs, the decentralization of the shopping facilities has been a reality for several years. The Minneapolis suburban shopping center movement has until recently confined its development to neighborhood and community shopping centers, i.e., Texa-Tonka, St. Louis Park and The Hub in Richfield respectively. The regional shopping center is not a reality at the present in the metropolitan area. When
The firms listed below are employing members of the United Brotherhood of Carpenters and Joiners of America and have the use of the Carpenters’ Label. They are manufacturers of all types of showcases, counters, wall cases, institutional equipment, kitchen cabinets, church furniture and special millwork used in banks, offices, bars, taverns, restaurants, hotels and all types of stores. Several manufacture prefabricated material used in the building of homes and all other types of construction.

In contacting these firms in regard to any of their products, you can be assured that they are made by competent craftsmen who are well-trained and who take pride in the product they make.

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Conrad Fixture Company
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DeVac Self Storing Window Company
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Grand Showcase Company
Hill Woodworking Shop
Harriet Millwork Company
Holdahl & Colstad, Inc.
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Jeppesen Cabinet Company
J. R. Jones Fixture Company
Kalco Company
Lee Wood Products Company
Main Street Fixture Company
Minnetonka Showcase Company
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Peters Cabinet & Fixture Company
Ramacier Sash & Door Company
Riverview Cabinet & Supply Company
Ross Manufacturing Company
Al Sax Highway Cabinet Maker
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NORTHWEST
the regional center (Southdale, in Edina, as a planned example) does exist in this area, this center will be the equivalent of existing downtown facilities in a suburban sense.

What effect will the suburban regional center have upon the neighborhood and community centers? I believe the regional center will tend to corner a large volume of consumer trade from the neighborhood and community centers, as they themselves have engulfed the independently located shop trade. However, there will always be a need, possibly on a smaller scale, for the convenience of the neighborhood and community stores, and even the corner late-hour grocer.

An argument for the regional shopping center developer is that the large center is merely recapturing the trade presently being lost to the suburban centers.

What is the solution to the problem for the neighborhood and community developments? I believe the present comparatively small centers will have to undertake a redevelopment program to recapture and hold the local patron. The new developments must be specialty centers catering to the immediate and surrounding neighborhood.

Such a specialty center I would propose would be A CHILDREN'S SPECIALTY CENTER FOR A SUBURBAN NEIGHBORHOOD. This center would be comprised of children's shops, both necessities and luxuries, but anchored by often used services with emphasis on a small medical and dental group. All functions of this center will cater almost exclusively to small fry and mothers... with father given a chance to rest or tag along as he sees fit.

The population increase, along with higher proportioned income in the nation, should tend to accent the larger buying power of the suburban family. A substantial portion of the family income goes towards the raising and maintenance of the children... this is especially true in the case of the suburban families as their ratio of children per family is at an all-time high.
and on the increase without sign of faltering.

Thus, the premise of a need for a Children's Specialty Center for a Suburban Neighborhood.

PURPOSE

Assume the project would be successful economically. The purpose of the center would be two-fold:

First, it would enable the child and parent to be more at ease while undertaking the usually tedious and ulcer-bringing ordeal of shopping for and with the youngsters. The trip to this center would be for the youngsters' and mothers' needs exclusively, thus eliminating the dragging of children through a downtown shopping trip. On such a trip for personal and household items, the mother would be much better off both physically and mentally, and even, in a long run, financially, if she hired a competent baby sitter. This would give the mother a much-needed day away from the woes of homemaking.

Now, to return to the matter of being at ease at the center. . . . The atmosphere would be casual, with a cheerful and gay character to the environment. All the people present would be more likely to be tolerant and understanding of the antics of the small fry and parents. The young shoppee and parent-guide, with the proper environmental spirit, are likely to grow into an improved individuality status and eliminate one phase of the cause of alarming increase in hypertension among children . . . therapy for whom starts with treatment of parents.

Secondly, but not least in importance, is the introduction of professional medical services to the center, which would not only give an added drawing power to specialty shops, but would also serve as a reciprocal to the doctors. . . . The child's visit to the usually-feared doctor and dentist in institutional surroundings would become not only a pleasant, but possibly exciting adventure with proper handling of architectural elements.

USE AND SITE ANALYSIS

The use of the Children's Specialty Center would be primarily for the families adjacent to and surrounding the immediate neighborhood. If it became a successful venture, I feel positive this project would be a prototype for developments throughout the suburban areas of all our large cities.

The location should preferably be near a fairly well-traveled local road on the fringe of a neighborhood. This should require wise local planning, so as not to
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Dick Diekema Const. Co., Inc.
Leo Mason
M. A. Mortenson Co.
Crawford Morz Co.
Searson Const. Co.
Palmier Const. Co.

ERECTOR
Dick Diekema Const. Co., Inc.
All State Steel Erection, Inc.
Lowe Const. Co.
Sequin Lbr. & Hdwe. Co.
J. W. Mouchka, Inc.
Eskstrand Const. Co.
J. W. Mouchka, Inc.
Larson Const. Co.
Minnesota Tank & Steel Erection Co.
Crawford Morz Co.
Searson Const. Co.
Palmier Const. Co.

PAPER-CALMENSON & COMPANY
County Rd. B & Walnut St. adjoining Highway 36, St. Paul 8, Minn.
Telephone Midway 6-9456 Duluth, Minn. Billings, Montana
Look about you—at yesterday's vacant lot—you'll see new, better and safer schools designed for modern learning. Today's youth has the benefit of better lighting, expansive recreation areas and the safety found only in steel construction. Pacal is proud of its work with architects and contractors in bringing the dreams of parents and educators into reality.

### Schools recently erected with PACAL STEEL

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>ARCHITECT</th>
<th>GEN'L CONTRACTOR</th>
<th>ERECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Paul, Minn.</td>
<td>McEnery &amp; Kraft</td>
<td>Dean L. Witches, Inc.</td>
<td>Minnesota Tank &amp; Steel Erection Co.</td>
</tr>
<tr>
<td>St. Paul, Minn.</td>
<td>Shiflet, Backstrom &amp; Carter</td>
<td>Maurice Mandel</td>
<td>Midwest Erectors, Inc.</td>
</tr>
<tr>
<td>St. Paul, Minn.</td>
<td>Cushing &amp; Terrell</td>
<td>M. A. Mortenson Co.</td>
<td>All State Steel Erection, Inc.</td>
</tr>
<tr>
<td>St. Paul, Minn.</td>
<td>Bordeleau &amp; Pannell</td>
<td>Chris Fuglevand &amp; Son</td>
<td>Chris Fuglevand &amp; Son</td>
</tr>
</tbody>
</table>

*Material: (S) Structural Steel, (R) Reinforcing Steel, (J) Steel Joist*
Important savings in time, money and materials with CONCRETE FRAMES AND FLOORS

These photographs illustrate one of the outstanding advantages of reinforced concrete frame and floor construction. They show how frame and floor work proceed simultaneously. This enables masons, plumbers, electricians and other tradesmen to do their jobs as the structural work progresses and results in substantial savings in time.

Reinforced concrete construction also saves money and materials. It requires a minimum of critical materials. Forms can be reused from floor to floor.

Flat plate or slab band designs reduce or eliminate most of the headroom required for beams and girders in other types of construction. This saves about a full story in height on projects such as the

Two views of Essex Apartment House in Indianapolis. Lower photo shows structural work at 9th floor, masonry work starting. Upper photo shows structural work at top floor with masonry work completed to 9th floor. Merritt Harrison, architect; Fink & Roberts, structural engineers; J. L. Simmons Company, contractor. All are of Indianapolis.

above—with accompanying savings in masonry, partitions, stairs, conduits, ducts and piping.

Concrete frame and floor buildings are low in first cost, require little or no maintenance and give long years of service. The result is low annual cost. Such buildings also are sturdy, durable, firesafe.

For help in designing and building reinforced concrete frames and floors write for free, illustrated literature. Distributed only in U.S. and Canada.

PO RT LA ND C E M E N T A S S O C I A T I O N
1490 NORTHWESTERN BANK BUILDING, MINNEAPOLIS 2, MINNESOTA
A national organization to improve and extend the uses of portland cement and concrete... through scientific research and engineering field work
attract automotive and service traffic through or into neighborhood units of residential character. Possibly the location could be between two neighborhood or community shopping centers (variety of facilities). In regard to locating near a regional center, the solution is either to be an integral part of such a center or to be a good distance away. Competition thrives when in adjacent areas . . . otherwise it is best to be without it.

Again I would like to point out that the proposed theoretical center would act as a primary service to the immediate neighborhood families and provide the child's material necessities and professional medical and dental outpatient care.

SPACE CHARACTER AND FUNCTION

The general character throughout the center should be cheerful and gay in spirit, providing an atmosphere of an exciting, yet organized, series of adventures in moving from shop to shop. The spaces should be arranged so that finding one's way is clearly but subtly defined and yet kept away from the usually rigid shop arrangement. The use of sculpture and mural panels, in a playful way, could capture the spirit along with serving a functional purpose as familiar landmarks to child and parent.

An extensive organized program for children and mothers could enhance the center's function to the community and provide an additional drawing power for the public. Such a program could include maternity and children's wear style shows, kidde bicycles and carriage parades, thrift programs in conjunction with local elementary schools, classes for expectant mothers and new mothers, cooking, sewing, nutrition, diet, beauty care and others held on an informal basis.

A very important part of the services offered by the center would be the nursery. This function would provide supervised care during shop hours for a few minutes to all-day care for the infant, the pre-school child to the primary school child.

The materials and fixtures used throughout the center must be durable and require minimum maintenance.

SPACE REQUIREMENTS

<table>
<thead>
<tr>
<th>Shops, Necessities</th>
<th>Square Foot Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity Wear</td>
<td>400</td>
</tr>
<tr>
<td>Infant Clothing and Supplies</td>
<td>200</td>
</tr>
<tr>
<td>Children's Clothes Boys</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Girls 500</td>
</tr>
<tr>
<td>Shoes</td>
<td>400</td>
</tr>
<tr>
<td>Baby and Youth Foods</td>
<td>200</td>
</tr>
<tr>
<td>(with dietary consultation service)</td>
<td></td>
</tr>
<tr>
<td>Children's Furniture</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shops, Luxuries</th>
<th>Square Foot Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toys</td>
<td>600</td>
</tr>
<tr>
<td>Books and Records</td>
<td>600</td>
</tr>
<tr>
<td>(with playing booths)</td>
<td></td>
</tr>
<tr>
<td>Wheel Goods</td>
<td>600</td>
</tr>
<tr>
<td>(with outdoor proving grounds)</td>
<td></td>
</tr>
<tr>
<td>Pet Shop</td>
<td>900</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services, Miscellaneous</th>
<th>Square Foot Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery (Supervised)</td>
<td>Indoor 800</td>
</tr>
<tr>
<td></td>
<td>Outdoor 800</td>
</tr>
<tr>
<td>Barber Shop (six stools)</td>
<td>600</td>
</tr>
<tr>
<td>Beauty Shop (include with barber shop)</td>
<td></td>
</tr>
<tr>
<td>Branch Child's Saving Bank</td>
<td>400</td>
</tr>
<tr>
<td>Lunch Counter with Soda Fountain, for intensive summer use (could be outdoors)</td>
<td>1200</td>
</tr>
<tr>
<td>Photographer's Studio (sales and waiting area, studio, etc. and darkroom)</td>
<td>1000</td>
</tr>
</tbody>
</table>

All shops will have adequate storage facilities and w.c. for personnel.

Kiosks candy, balloons, etc., scattered in open areas.

SERVICES, Professional

A group of medical practitioners in Minneapolis have made the necessary financial arrangements to merge their practices and have interested several specialists in joining them in forming a small clinic. This facility
Here's What Architects Say:

"Liked the board of nails very much—so easy to pick out the one needed . . ."

"Will be using a great deal in the future."

"Those boys at Independent are away out in the future. They've done it before. Will be using a great deal in the future."

"Very happy to have this board—it will be most helpful."

"Extremely interested in the sample board and STRONGHOLD Nails. . . ."

"Often specify nails by name and have used Independent before. Glad to get literature."

"Nice to have this board—it will be most helpful."

"Up to this time we haven't been specifying nails by name. Now that we have a nail board, we will."

"never realized that this company had such an extensive line—very interesting."

"Would like very much to have a nail board. Good idea."

"I'm going to use STRONGHOLD Nails every place I can in my own house. . . ."

"Certainly, I'll specify nails now. There's something for every need. Sharp as a needle, too . . . ."

"They certainly do have a complete line."

Architects—SEND FOR THIS SAMPLE BOARD FREE!

See how STRONGHOLD® and SCREW-TITE® Nails will enable you to do every fastening job better!

Nearly 25 years ago we introduced STRONGHOLD and SCREW-TITE Nails—and revolutionized fastening methods! STRONGHOLD Annular Thread and SCREW-TITE Spiral Thread Nails can't loosen—ever! Their scientifically engineered threads "lock" with wood fibres—hold permanently tight.

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Get acquainted with the complete STRONGHOLD LINE. Get this sample board—keep it handy. We'll gladly send it to you without cost or obligation. Just write us on your business letterhead. And we'll include a volume of invaluable technical data on fastenings and fastening methods developed by the continuing testing and research program we have sponsored for a number of years at Virginia Polytechnic Institute under the direction of Dr. E. George Stern, Director, Wood Research Laboratory.

There is only one STRONGHOLD Line—the Original. Made only by INDEPENDENT NAIL & PACKING CO. Pioneer Developers and Largest Manufacturers of Threaded Nails in the U.S. BRIDGEWATER, MASSACHUSETTS, U. S. A.

Northwest
will enable them to share certain spaces and functions and to serve their patients more efficiently and economically.

A preliminary study in a typical suburban community conducted by them indicates the importance of obstetrics and gynecology and pediatrics in the services offered by such a clinic. With children's dental specialists also interested, the forming of a children's clinic and the idea of combining with children's shops to form a children's specialty center appealed to the practitioners wholeheartedly.

The staff will include:

A. Professional
   2 obstetrician/gynecologists
   2 pediatricians
   4 dentists
   1 specialist in children's diseases

B. Technical
   6 nurses
   1 anesthetist
   1 lab assistant
   1 x-ray tech.-lab assistant

C. Business
   1 business manager
   2 receptionists—stenographers
   1 bookkeeper; stenographers

Facilities to be included as follows:

A. General
   1. Waiting room for 30 patients (350 sq. ft.)
   2. Reception area (control, patients' records, reception)
   3. Offices
      a. General office
      b. Business manager's office
   4. Toilets (adjacent to waiting area)

B. Professional
   Ob/gyn
      4. examining rooms (75 sq. ft. each) with dressing cubicles
   2. obstetricians' office (100 sq. ft.)
      maternity-waiting area (100 sq. ft.)
      private toilet

   Pediatric
      2 pediatricians' office (100 sq. ft.)
      4 examining rooms (75 sq. ft. each)
      Pediatrics waiting area (100 sq. ft.)
      private toilet (could combine with maternity waiting area)

   Dental
      1 dental office (100 sq. ft.)
      4 dental examining rooms
      4 dental operating rooms
      1 dental surgery (100 sq. ft.)
      1 dental waiting area (300 sq. ft.)
      1 dental lab (75 sq. ft.)
      1 dental dark room, portable x-ray (75 sq. ft.)

C. Technical
   X-ray
      X-ray room—portable fluoroscopy (120 sq. ft.)

   Therapy
      1 therapy room (75 sq. ft.)

   Laboratory
      Laboratory (100 sq. ft.)

   Pharmacy
      Prescriptions filled (400 sq. ft.)

D. Miscellaneous
   Commons room with kitchenette
   Nurses room with lockers and quiet area
   Ample storage space
   Heating plant/s and miscellaneous storage (1100 sq. ft.)

OUTDOOR AREA—used extensively during summer months.

Noisy—soda fountain
   a children's concession, i.e., miniature train

Quiet—landscaped area with benches for relaxation

PARKING
   150 Spaces (if possible, no road crossing for pedestrians)
   50 Overflow
   50 Personnel parking

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   Eckbo, Garrett
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   Nelson, George

STONE COMPANY APPOINTS
SALES DIRECTOR

Ben F. Meltzer, well known to the building industry in the Upper Midwest, has joined the Rubble Stone Company, Inc., Minneapolis, Minnesota. Fred J. Lemieux, president of the company, announced the appointment, effective October 1. Mr. Meltzer will be in charge of sales to the construction industry. For many years he was the Minneapolis branch manager for the Ochs Brick and Tile Company, Springfield, Minnesota.

ALBERTS NEW SALES MANAGER
FOR MARMET

Edwin P. Alberts is the new sales manager of Marmet Corporation, Wausau, Wisc., according to an announcement by A. C. Heinzen, executive vice-president of the company. Mr. Alberts will have charge of the sales of Marmet's aluminum windows, aluminum doors and entrances for industrial and institutional type applications. Before going to Marmet Corporation he was district sales representative of Kawneer Metal Company in Kansas City, for the past ten years and prior to that time for two years was sales representative for the Crown Iron Works.
Waylite is an aggregate used in the manufacture of lightweight concrete blocks. It consists of blast furnace slag expanded to produce a lightweight cellular structure by a patented process controlled exclusively by the Waylite Company. In Minnesota this aggregate is made only by the Waylite Company in Duluth. The Waylite Company makes no lightweight blocks, but sells its aggregates to a limited group of firms who manufacture quality Waylite blocks. Zenith Concrete Products Company is one of these firms, and is the exclusive Waylite distributor for northeastern Minnesota.
TWIN CITY ARCHITECTS PLAY AND EAT AT BARBECUE

Architects from the Twin Cities, some 50 of them, were the guests at a third annual barbecue given at the Lake Minnetonka home of the president of the Cold Spring Granite Company recently. Our pictures show some of the architects as they partook of the fun and food.

First picture shows R. V. McCann, second from right, aiding the chef with his preparations. Ralph Alexander, Phil Bettenburg and Roy Thorshov (l-r) watch with bated appetites. Second picture shows the chef heaping the plates of Victor Gilbertson, George Townsend and John Madson. Lower picture shows John Paul, Joe Hartman, Clark Rambo, Harley Johnson and Bob Hanson ready to take a ride in Mr. Johnson’s inboard cabin cruiser which he brought over from his lake place for the day.

CARPENTERS' UNION TENDS OWN FIRES, AIDS IN CIVIC WORK

One of the oldest craft unions in the United States, the United Brotherhood of Carpenters and Joiners, has developed from a group interested mainly in providing for the advancement of its members into a civic minded grouping of 13 associated unions with 11,000 members in its Twin Cities Carpenters' District Council.

Founded in 1881 with four unions covered, the brotherhood was headed for many early years by Peter McGuire, the "Father of Labor Day." The present day organization encompasses carpenters, millwrights, cabinet makers, millmen, pile drivers, floor coverers and insulation blowers.

The Twin Cities council has contracts with hundreds of employers, including Associated General Contractors of Minnesota and the Home Builders Associations of both St. Paul and Minneapolis. Numerous independent contractors also are covered by brotherhood contracts. Other types of firms which work with carpenter-employees are fixture, sash and door and metal combination window shops, carpet, tile, linoleum and specialty stores.

In 1944, a combination labor-management program redesigned the all-important apprenticeship program in the Twin Cities and up to now 2,000 apprentices have been indentured. About 1,000 have graduated as journeymen. Their training included school as well as on-the-job training. Employers contributed half and the council contributed half of the cost of this program and the standard of local workmanship since 1944 has seemed consistently on the upgrade.

"Along with high standards of craftsmanship, a union man learns while an apprentice the sense of responsibility which makes him and the centuries' old tradition of his brotherhood a thing of tangible value in the construction world," officials said. "Thereby hangs the tale of why Carpenters' Union headquarters are often a port of call of architects and planners in search of reputable builders."

Throughout the United States and Canada, 2,500 other carpenters' locals through the years have worked for improvement of working conditions and helped erect such "milestones in labor history" as free schools, the eight-hour day, workmen's compensation and unemployment insurance. In return, they have undertaken many responsibilities. For their own, each 30-year member is provided, at 65, with a pension which is his whether he has decided to retire or not. In addition to funeral and disability allowances, the 2,500 locals maintain a famous home at Lakeland, Florida, for aging members.

Outside responsibilities undertaken are connected with the YMCA, Boy Scouts, Heart Fund, Sister Kenny Fund, and the National Foundation for Infantile Paralysis.

BAKER OPENS ST. PAUL ENGINEERING OFFICE

John T. Baker, who for the past four years has been chief mechanical engineer as well as an associate of the firm of Haarstick, Lundgren & Associates, architects and engineers, located in St. Paul, Minn., has terminated his affiliations with this firm and has entered private practice as a registered professional engineer.

The new firm will be known as J. T. Baker & Associate Engineers and will be located at 1835 University Avenue, St. Paul, offering consulting engineering services to various architectural offices throughout the area. Mr. Baker holds registration in Minnesota and Iowa, with registration pending in other states around Minnesota.
Cities large and small are learning that it pays dividends to write their specs for lighting around the Millerbernd Elite standard. Here's why:

The Elite is easier to wire because of the improved mast arm design and the generously proportioned base.

The Elite is faster to assemble and erect, simply because there are fewer components.

The Elite is economical to maintain because of extra-strength materials and extra-careful craftsmanship.

The Elite is actually priced below many other types of lighting standards.

But most important: Its distinctive design impresses citizens and shoppers... goes a long way in creating the opinion that here is a progressive city.

May we send you our Booklet OTA? Just write...

MILLERBERND MANUFACTURING CO. Winsted, Minnesota

Millerbernd Elite* lighting standards

Five modern styles available
Booklet gives complete descriptions and engineering specifications.

Elite Conventional Parkway Fluorescent Long-Span

Electrical Manufacturing Company
Proper Installation
Important in Hardwood Flooring Use

By W. A. Gerrard
W. A. Gerrard Company, Minneapolis

In two previous articles we brought out the importance of a sound installation when installing hardwood floors directly on sleepers or over sub-floors and features of floors that are set in mastic and also nailed. This time we are going to take up installing floors in mastic over a concrete slab below grade, on grade and above grade, installed directly on the slab and also over corkboard for added resiliency. As we mentioned before, the most important part of the floor is a good foundation. When we talk about a floor laid in mastic directly over a concrete slab, we must have a good sound slab that is free from moisture. This can easily be done by observing the following suggestions. You will find when installing a slab in this manner it is very inexpensive and is positive and sure to give you a trouble-free slab indefinitely.

CONCRETE SLAB

We feature the use of Seal-Tight Premoulded Membrane although we do not sell it ourselves. This membrane, when used according to the manufacturer's specifications, will definitely give you 100% satisfaction for the impermeance of .0066 is 600 times or 60,000 percent greater than that of a duplex laminated paper. Where this membrane has been used according to the specifications, and where the concrete slab has cured, you can take a moisture reading test and find the moisture is nil on the concrete, thus giving you a dry slab so you can lay any type of floor over it without having to worry about moisture. I have written to the W. R. Meadows Company for a complete booklet called "Tech Tips," of which they were kind enough to send me several hundred copies that are free for the asking to any architect or contractor in this area who is interested in this type of construction. This will cover every phase of a properly installed slab using the premoulded membrane, including cork expansion joints. I have had several architects request this information and have mailed many copies out already. This literature will explain thoroughly how to install the membrane so you can walk on it, use your wheel barrows and install your reinforcing without puncturing it. When a membrane is violated during the course of construction it can not perform its function. When a floor slab is installed according to these instructions...
there is absolutely no need for further waterproofing of the slab for when the concrete is cured, no further moisture will be taken on from wet or moist ground conditions. In order to set your screeds for screeding your slab without violating your membrane, the three following suggestions are made:

1. Utilize a perforated plate fastener. A hole, of larger diameter than that of a stud, is bored through a 2 x 4. A nut on the threaded stud sets the screed height. After screeding, the fastener is left in the concrete.

2. Employ an adjustable pipe screed chair and a ¾” galvanized pipe. After screed is accomplished, the pipe and the threaded eye are removed, the chair remains.

3. A 6” square of ½” plywood scrap through which a 20D coated nail has been driven, functions as the screed support. The mechanics are the same as for number 1. By using the above way of setting your screed, you will find that you will never at any time violate the membrane; also, you will find that you will be pouring a much drier mix concrete than before. You will not have any loss of moisture going into the ground below. You will have a slower curing slab but a harder one when complete. If any reinforcing material is necessary, this can be placed directly over the membrane where required. After the slab is poured and screeded, it is necessary to give it a smooth float finish but not necessarily a steel troweled finish. Make sure that all bumps and humps, and all aggregates, are well troweled down.

The illustrations above show screed procedures and details are given in paragraphs at left.
This finished gym floor shows the continuous strip pattern as it looks when completely laid and properly finished.

**INSTALLATION OF FLOORS OVER A CONCRETE SLAB**

There are several types of floors that can be installed on this slab. There is the laminated block flooring in various thicknesses and designs, both unfinished and prefinished. There is also a unit block which comes in 25/32nds or 33/32nds in thickness and 6-, 9- and 12-inch squares utilizing either 1½" or 2½" width flooring in a large variety of wood. Then we have the most popular type of floor laid in mastic today, which has proved very satisfactory in our schools and gymnasiums, warehouses and factory areas. This type of flooring is the continuous strip pattern flooring. This flooring, as you can see in our illustration, is laid in courses, end to end, across the gymnasium or floor area. This is tied together with lengths of steel spline, driven into the grooves on the ends. This type of floor is one of the most versatile floors yet perfected. It is easy to maintain and also is the easiest to repair.

**REVOLUTIONARY NEW INSULATION!**

**KIMSUL 48' Sheathing Blanket**
Attaches to Outside of Studding

For complete information call...
Pleasant 6831

or write...

**DISTRIBUTOR**

**THE DENESEN COMPANY, INC.**

2836 COLFAK AVS. SO., MINNEAPOLIS
You can control the expansion much easier because you have the expansion all in one direction.

It has been our past experience that where we install these types of floors, whether it be the gulf coast of our country, the northern part, east or west, we have found that it is definitely very unsatisfactory to install a saturated felt over a concrete slab. A number of years ago I wrote to one of our largest manufacturers of resilient floor tile, asking them why they did not specify the use of felt paper on a concrete slab. They answered my inquiry as follows:

"The question has come up from time to time regarding advisability of using asphalt saturated felt on concrete floors either on grade, or below grade, when installing asphalt tile. Our research laboratories have constantly advised against this type of installation. When this felt is installed it has the tendency to absorb ground moisture, should there happen to be any coming through the slab, as there usually is, and causes therefore an excessive accumulation under the tile. We have found no advantages in such an installation of the felt under these circumstances and therefore we strongly recommend against its use."

This letter bears out what we have been experiencing in the use of any felt paper. Therefore, we strongly recommend against its use. This is why we recommend the use of the premoulded membrane under the concrete slab entirely.

Let's look at it this way. Lay a piece of paper down on your desk and set a book on top of it. Now try to push the sheet of paper through the book. It is quite impossible, isn't it? Now take the same book and lay it down on the table. Take this same sheet of paper and put it on top of the book. It is very easy to lift off. Therefore, capillary action and hydrostatic pressure will not disturb the premoulded membrane. If it were installed on top of the slab it would be very easy for it to bubble up and cause excessive moisture to accumulate and be given off to the floor at a later date. You may have a very rainy condition today and three or four weeks from now you will find that your slab is beginning to buckle. The weather at this later date could be fine and dry and you would wonder what happened. Well, naturally your slab has absorbed all the ground moisture during the rain and this moisture has gone up through the slab into your felt paper where it was absorbed. As soon as it got warm and dry above, the moisture had to come through: therefore it was sucked up through the concrete slab, through your felt membrane, which acts as a sponge, and was given off into the finished hardwood flooring, causing this trouble. Once again, may I suggest not to specify any felt paper over, or under, a concrete slab.

**PRIMING THE CONCRETE SLAB**

The first step that we take after receiving a slab for our floor is to inspect it to make sure that it is level and true, that there are no bumps or humps. If there is a dusting action present it is wise to prime the floor with a light asphalt primer. This has some waterproofing effect and does settle any dust and give one a bond...
for the mastice. After the primer is dry, take a notched trowel that will trowel on the mastic approximately 30 feet per gallon. The mastic that we are using is a fiberated cold troweled mastic, which is a cut-back, not an emulsion. We have proved that a cold-troweled mastic will outlast a hot mastic, is safer to use and will remain tacky indefinitely, whereas a hot mastic is dangerous to use, more expensive as far as labor is concerned and emulsion mastics are dangerous to use because they contain water and sometimes are laid on too soon and moisture is trapped under the floor causing excessive absorption into the floor.

SETTING THE HARDWOOD FLOOR IN MASTIC

After the floor is troweled to approximately 30 feet per gallon of mastic, you begin to set your floor in a full cold-troweled layer of mastic. Some contractors prefer to set it in immediately and some prefer to let the mastic set overnight. In either case you have a sure bond.

INSTALLING CORKBOARD

In some places where a greater cushioning effect is required, in a gymnasium or dance floor, instead of laying the flooring directly over the concrete slab, we trowel on mastic approximately 40 to 50 feet per gallon and set in 3/4" cork impregnated board, in preferably 3' x 5' sheets. These sheets are staggered and set in this full cold-troweled mastic. After the cork is installed we trowel on a cold-troweled mastic with a 30-square-feet-per-gallon trowel over the entire area of the cork and install the floor accordingly. This gives a wonderful added resiliency to the floor.

EXPANSION

Expansions in mastic type floors have been terrifically misused. Quite often the plans and specifications call for certain areas to be laid up tight. In no case should a mastic floor ever be laid tight against any wall, column, pipe or doorway. In designing an area to receive a mastic type floor, you should make sure the floor has adequate expansion at all walls and columns, being sure there is adequate coverage, such as angle iron base, or wide enough wood bases to cover this area. When you are in a gymnasium area, or any area that is at least 30 feet wide or more, you have to have a minimum of 1 1/2" to 2" expansion at the perimeter of the area, especially on the sides. This is a must.

Whenever there are any gymnasium upright fixtures installed in this floor, they should never be installed directly through the floor without having cork surrounding them for proper expansion. A finished cork can be used where the areas are exposed. The rough porous cork should be used where they can be covered, or around the perimeter of the room where you get the most expansion. We much prefer to use a rough cork because you get much more expansion than you get from finished cork, which is much more dense. The first year in any building is the worst as far as expansion is concerned. All precautions should be taken during various times of the year, for the installation. The flooring contractor should be left to use his own judgment when installing the floor, leaving numerous

(Continued on Page 66)
Members of the Producers’ Council played their annual golf matches at the Minnesota Valley Country Club recently and then turned to have a lot of fun in the evening of entertainment which followed. Mr. and Mrs. A. D. Hammerstrom were hosts to the group. Mr. Hammerstrom is president of the Minnesota-Dakota Chapter of the PC. Our cameraman was on hand and caught those shown opposite, in each case identified left to right.

1—Mrs. Stan Beckstrom, Mrs. and Jerry Halseth. . . . 2—Vern Larson with Mesdames Musser and Barr. . . . 3—All golfers (????) claimed the trophy. B. J. Mulcahy, Jr., Bob Reed, Al Fischer, Joe Jester, Paul Buck and Jim Coulter. . . . 4—Mrs. Joan Loretz, Mr. and Mrs. Ralph Kuehn and Jack Bissell. . . . 5—Mrs. Paul Buck, Mrs. and John Davies and Paul Buck. . . . 6—Carl Fogelberg, Bob Olsen with Mrs. Olsen and Mrs. Fogelberg. . . . 7—Al Taylor and Sam Carpenter and their Misssuses. . . . 8—Vern Larson with Mr. and Mrs. C. I. James. . . . 9—George and Mrs. Donald with Denton and Mrs. White. . . . 10—W. V. Anderson, B. J. Mulcahy, Jr., Mr. Mulcahy, Sr., and their wives. . . . 11—John and Mrs. Healey. . . . 12—Mr. and Mrs. Willard Hamilton with Mr. and Mrs. Victor Bertramson. . . . 13—Mrs. and Miles Panek, Mrs. Clair Loretz, wife of NORTHWEST ARCHITECT’s Clair Loretz, Dale and Mrs. Musser. . . . 14—Mr. and Mrs. John Healey, Jim and Mrs. Coulter. . . . 15—Jim Coulter and his wife, Adeline. . . . 16—Mr. and Mrs. C. L. Ammerman, Mr. and Mrs. Hammerstrom. . . . 17—Mrs. and Bob Reed, Mrs. S. M. Olson, Mrs. Larry Reak. . . . 18—Bob and Mrs. Hauenstein (seated) with Sam and Mrs. Dittenhoeffer. . . . 19—Stan Beckstrom, Mrs. and John Barr. . . . 20—Duff Longtin and Sex Benson with their wives. . . . 21—Chuck Wetzler, Ruth Lovaas and Larry Reak. . . . 22—John and Mrs. Timan, Joe Jester, program chairman, and Mrs. Jester. . . . 23—Al and Mrs. Fischer (standing) with Mrs. Vern Larson and Mag Olson.

TWO HUNDRED ATTEND REDWOOD ASSOCIATION MEETING

The largest group ever to attend a Northwest industry-sponsored meeting was on hand on September 22 for a dinner meeting for architects, after which problems in the use of redwood in architecture were given a thorough discussion.

The meeting was arranged and sponsored by the California Redwood Association in co-operation with the Minneapolis and St. Paul AIA Chapters. It was held in the Calhoun Beach Club and was attended by a number of redwood experts.

Owen T. Stebbins, San Francisco, represented the California redwood suppliers and conducted the program which followed the cocktail hour and steak dinner. He showed a colored motion picture which demonstrated the western influences working on contemporary architecture, the film showing the architect-pioneers who led the new design trend and their uses of the new materials.

The speaker expanded on the uses of redwood in architecture, illustrating his added remarks with colored slides. There also was an exhibit of contemporary architecture in photographs by some of the country’s leading photographers.

Canton Redwood Yards of Minneapolis had a number of redwood siding and paneling displays set up at the meeting.

Typical of the redwood uses shown at the meeting are these two Canton demonstrations.

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The use of the word "expansion" in the theme of this seminar is particularly appropriate because many planners and students of social and economic problems are continually misstating the phenomenon of the growth of cities and the shift in population that has and is taking place.

The expression "flight from the central city" is interpreted to mean people leaving the central city, with an attendant loss of city population. Actually what is taking place is a shift in population of the higher income groups from the older sections of the city to suburban areas, and an expanding urban population, which in most cases could not be housed in the central city even if it wanted to be so housed.

This flight of the higher income groups has in most cases been from older areas of the city, where housing and general living conditions have not been satisfactory. In their place have come people of lower income groups, and those of the so-called minority groups. Declining property values have resulted, either because of age and obsolescence or poor maintenance. Unless corrective measures are adopted the ultimate ends are so-called slum areas. Situations of this kind are one of the major problems of community expansion.

The flight of higher income groups to suburban areas has created another problem. That is the one of transportation. These higher income people substantially all have one or two cars per family group. Where once they depended upon public transportation, they now are no longer depending on it or in many cases not using it.

This change in travel habits has resulted in mass transit in most cities, becoming a sick industry and, as a result, of declining community usefulness. Its solvency and continuation is seriously threatened. Yet mass transit is essential to the continued well-being of our central cities. The lower income groups must have it. No other community problem has received less consideration and thought than this one.

We in Pittsburgh have done some outstanding things in improving our city. Our clearing of 60 acres of a blighted commercial area at the "Point" in the Golden Triangle, replacing it with a 36-acre historical park and the Gateway Center project, evokes the enthusiasm of visitors from many cities over the nation. The conception of Gateway Center with its towering office buildings in a park-like setting with liberal open spaces between the buildings, with spacious lawns and planting, inspires the most conservative businessman to comments of approbation. The fine new open-deck parking garages, the Mellon Square Park and underground garage, the towering United States Steel-Mellon Bank Building and the Alcoa Building, as well as many others, impress the visitor of the changes in the Triangle. The clearing of the atmosphere through smoke control, resulting in exterior cleaning of many buildings and new store fronts all contribute to the new Triangle. Yet even with all our changes and improvement we have failed to come to grips with our mass transit problem. This despite the fact that the daily flood of private automobiles in the peak hours continues to congest our streets and the throats leading into the Triangle.

One cannot understand how a community can willingly pour $30,000,000 of public funds into a great new airfield and terminal building, subsidizing air travel which yearly at the Greater Pittsburgh Airport handles about 1,500,000 passengers, and disclaim any public responsibility for the solution of the problem of mass transit which used to handle more than 200,000,000 passengers per year.

Yes, one of the major problems of community expansion not now being solved, is that of transportation. The older blighted areas in central cities are generally ones of extremely high density of population. This raises a question in redevelopment. Are we to continue those densities by reaching up with high tower apartments, or can we find some other solution which may mean, and probably should mean, less density and more openness between buildings?

Reduction of density means the moving of low income people into other areas which in turn requires consideration of their daily transportation at their new locations. Unless adequate mass transportation facilities are provided it appears that those in the lower income groups are largely tied to the more densely built up areas in central cities. Perhaps the sound solution to this problem poses a challenge to the architectural profession through the AIA to sponsor a competition.
to find the best solution. Such a competition could contribute greatly to sound redevelopment programs.

In analyzing the "Problems of Community Expansion," I have been speaking of larger urban areas.

The expansion of smaller communities is not apt to create such serious problems as in the larger urban areas, except where a large industry locates a plant near a small community. Such a situation does create pressing demands for community services such as schools, water, sewers, recreation facilities and housing.

The Satellites Present Problems

In the large urban areas one finds a number of so-called satellite or dormitory type communities surrounding the central city. It is in such communities that the expansion of urban areas has taken and continues to take place. Independent in government, moderately self-contained for certain community services, they often have an attitude of superiority to the central city, an attitude of independence and self-sufficiency, notwithstanding the dependence on the central city for assistance in certain services. These services may be municipal, such as the securing of the water supply, trunk sewers, the use of library facilities, hospitals, recreational and cultural resources. Under situations involving a number of satellite communities, overall metropolitan problems are not being adequately met. In many cases the tax burden of the central city is increased, because the impact of the daily flow of people to and from places of employment in the central city places additional burdens on that municipality.

By the same token that the suburban areas have drained off the higher income population from the central city, their existence, along with the automobile, has changed the buying habits of the suburban population.

All of us are familiar with the growth of suburban shopping areas, and the trend in some cities for the location of branch department stores in large suburban shopping centers. This trend is threatening the older established shopping areas in the central city and may eventually affect the tax base of the central city.

One of the failures of growing suburban areas is the failure to provide adequate, sound, long-range planning. In our city, Pittsburgh, we have, and have had for a number of years, a competent, well staffed City Planning Commission. In many of our suburban areas we find only token planning commissions. With no staff, and therefore no technical guidance, these commissions are commissions in name only.

All of us in recent years have been in suburban communities, subdivision developments laid out with inadequate street patterns and subdivision controls. We have seen improperly located and poorly planned shopping areas come into being. And if that is not enough, we find communities without any form of zoning, or in many cases where they do have zoning, we find the ordinances have been copied from some other community, without any relationship to a long-range plan the community should have.

In my opinion, as part of the "Architecture of Community Expansion," most urban areas need a form

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of over-all government which should be designed to permit the satellite community to retain its so-called "home rule" on purely local problems, with the over-all government responsible for those matters affecting the area as a whole. Unless urban areas are so constituted we will probably continue to compound the felony of unplanned and undirected growth. Future generations will pay for this.

A few years ago the AIA carried on a program of what was called "Conversations Across the Nation." I was honored by being asked to serve on the Pittsburgh panel. I suppose the only reason I am here today is because of something I said during our conversation in Pittsburgh.

Here is what I said, "They (architects) seem to lack an understanding of the social implications of the things they deal with, a lack that reminds me of a lot of engineers who do not get beyond the drawing board stage because they keep their noses to a certain type of work and do not broaden. They have no imagination and no knowledge of social and political problems. It may be because of the type of training they have had on the job they do, that their sights are entirely too low. When a man leaves school he is only learning how to start to apply his knowledge. He is never through learning." I am not apologizing for what I said, although if I had had more time I could have probably stated my thesis better.

Now what did I mean? Let's see if I can illustrate in relation to the theme of this afternoon's seminar.

The society of an urban area is complex; so are the problems of an area. They involve physical matters and social reactions. Their solution requires not only technical and engineering know-how, they involve understanding of human relations and human reactions. Should their solution be left only to the politician, who may be motivated by good intentions, but who is also conscious of votes and who may not have even the education or mentality to find the solution? Should their solution be left to those persons, who are exceedingly vocal, playing upon human emotions, likes and dislikes? Should not those of education and training take their place publicly and openly in solving these problems? Many architects and engineers never participate or mix in public affairs. They often have limited understanding of the humanities, and those forces that motivate people.

**Broad Purview Required**

It is not a sufficient contribution to society to prepare an esthetically handsome concept of a structure, to see it through to completion, and to feel a personal sense of pride in the result. What is needed also is an understanding of the problems of society, and of the community, a willingness to participate in the sometimes rough and tumble battle of solutions and not shrink back, wrapped in a cultural cloak which does not permit a push here or there if necessary. Professional men must be prepared to combat those men who set themselves up as leaders, not because of the knowledge or desire to help society, but because they can talk loud and long. This doesn't prove they are right.
We have several instances in the Pittsburgh area of architects serving effectively on planning or zoning commissions. Also, we have examples of architects serving on civic agencies and housing associations, but we have more examples of architects who make no contribution to community affairs. What I am concerned about is the need of more architects participating actively in community affairs and in helping shape and form public opinion. To do this means emerging from a form of sheltered, cloistered participation in community affairs, into one of stimulating action. The only risk involved in such participation is that one may be subject to criticism and sometimes defeat. If that happens, one must not be so thin skinned as to take his toys and go home. All of us at times have lost what has been called "the ball game." What is required is the willingness to take the risk of losing and, if one does lose, to stay in there for the next game. The architect can contribute greatly to solutions of the problems of community expansion.

Flooring Installation

(Continued from Page 59)

cracks throughout the floor where necessary for excessive moisture that may accumulate. If he is installing a floor in the winter time when the heat is turned on, he realizes that the floor is laying at approximately 1% moisture content. Then in the summer this floor will have about 10 to 15% moisture content. There-
fore, in the winter he must lay a floor much more loosely than he would in the summer during the humid months. A good flooring contractor will carry with him a moisture reader to test the moisture content of his floor, or he will know what it is when it arrives on the job or when he begins the installation. Therefore, he knows whether he is to lay it tight or loose. The owner should be instructed not to criticize the flooring contractor for laying floor in this manner because a reliable, experienced floor contractor is going to install a floor according to the experiences he has had in past years. This way he is going to install a floor that will be as trouble-free as possible, taking all precautions that are necessary.

In our next article we are going to cover finishing of various types of floors and also the maintenance of these floors.

YOUR TALENTS ARE OUR MEAT!

The pages of Northwest Architect are the meeting place — the town square — of the architectural profession. They are always open for the presentation of your designs and your ideas on today’s building problems. When you have an article and drawings and photographs you feel are good for our use, send us a note about them . . .

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BRUNSWICK INTRODUCES
TWO-PUPIL STACKER, REDESIGNS GYM SEATS

First two-pupil stacking desk on the school furniture market has just been introduced by The Brunswick-Balke-Collender Co., Chicago. Designed to provide more economical use of classroom space, the new two-pupil desk has a continuous work surface of 20 x 48 inches. Available in five heights, the new desk is constructed on the same advanced design principles as the rest of the Brunswick School Furniture line.

A complete re-designing of Brunswick-Horn Folding Gymnasium Seating has just been announced by the Horn Division of The Brunswick-Balke-Collender Company.

"The new design improvements include more comfort, ease of operation, improved understructure and more positive locking for greater safety. Great structural strength is also an important feature of the new folding gymnasium seating," according to F. G. Nicholas, sales manager of the division.

He pointed out that wood is used for only three purposes in construction, none of which are for structural strength. Wood is used to sit upon, to walk upon and for skirtboards. The entire understructure of Brunswick-Horn Folding Gymnasium Seating is of metal. All support columns are made of steel tubing, instead of angles, shapes or bends, for maximum strength.

Rises can now be furnished in two heights—nine inches and 11½ inches. The new design also allows Brunswick-Horn to furnish 24-inch spacing from back to back of seats in addition to the 22-inch spacing previously provided. Seats are 18-inch "chair height" for maximum comfort.

The opening and closing of Brunswick-Horn Gymnasium Seating has been made easier and smoother with the use of a simplified and more positive lock and elimination of the necessity of tilting the seatboards.

Other significant design changes in Brunswick-Horn Folding Gymnasium Seating include a method of locking each seat row as it opens and eliminating any possibility of the unit's creeping forward on the floor, skirtboards that slope back under the seatboards to allow spectators to move their feet and legs freely and remain seated while people pass in front of them and an improved sightline for spectator enjoyment.

TINY "DOOR-EYE" FOR ENTRANCE DOORS GIVES FULL OUTSIDE VIEW

Residents of homes or apartments and hotel, motel and tourist court guests can enjoy greater privacy and safety when entrance doors are equipped with Private Door Eye, a new optical development, according to its maker, Callboy Co., Minneapolis.

Only ½-inch in diameter, it gives a clear, 173-degree angle view of anyone asking to be let in. The caller can't look in because of the "one-way" design of the lens elements.

The device consists of a small metal tube containing a tiny but powerful, wide angle precision lens, which gives a clear, bright image. It affords privacy and safety from intruders, since the door need not be opened until the visitor is identified through the "eye." Because the range of vision given by the device is about 7 feet (within a foot of the door), you can see if more than one person is there. The greater the distance from the door, the wider is the range of view.

Private Door-Eye is quickly and easily installed by drilling a ½-inch hole at a convenient height in the door. It is inserted from the outside and anchored securely inside by a threaded retaining ring, making it tamper proof. A coin is used for tightening the ring. It is available in lengths to fit any door up to 2½ inches thick, each with a ¾-inch adjusting range.

The list price of Private Door-Eye is $8.95, postage paid, from the Callboy Co., 7147 Lyndale Ave. S., Minneapolis 23, Minn.

MARMET'S "JACK KNIFE" HELPS SOLVE WASHING PROBLEMS

With a positive weathering feature that eliminates the possibility of air or water infiltration past the operating sash and frame, is a feature of the new "Jack Knife" window developed by Marmet Corporation, Wausau, Wis., and announced by E. P. "Andy" Albert, sales manager.

It is especially designed for air
conditioned and multi-story buildings where washing is always a problem but it can also be used for outside ventilating, if desired. Because the sash “jack-knifes” the outside can be cleaned from the interior and closed with a locking key, thus eliminating any pneumatic or other mechanical device.

The sash can be glazed with ¼” plate or 1” double glazing. The operating sash is either 3/16” or 3/16” tubular, depending on the size of the opening. Tests have shown the air infiltration to be far below the minimum required. Water tests show no leakage. Projection can be either in or out and the windows can be either horizontally or vertically projected.

NEW HINGED-COVER ELECTRICAL ENCLOSURE

The Adalet Manufacturing Company has announced a new hinged-cover type of cast-aluminum-alloy (Adalloy) weather-proof enclosure, whose “light weight makes for easier handling, lower shipping costs and easier drilling and tapping of conduit and mounting holes.”

Being rustless, aluminum assures a quality enclosure that appeals to ultimate users, the company said. Sizes range from small ones to a recent new one that is 24” x 36” x 12”.

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With all production facilities from patterns to finished enclosures under their control, Adalet is equipped to handle standard or special boxes. Also, special corrosion resistant aluminum alloys are available for chemical, sewage disposal, marine and similar applications, they said.

This hinged-cover enclosure, as well as other types of aluminum alloy weatherproof boxes, is described in the new Catalog Section G-6-55, available from the manufacturer, The Adalet Manufacturing Co., 14300 Lorain Avenue, Cleveland 11, Ohio.

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TAPECOAT INTRODUCES SINGLE-WRAP COAL TARM TAPE

The development of a single-wrap coal tar tape for pipe, pipe joints, fittings and couplings has just been announced by A. W. Bohne, president of the Tapecoat Company.

In announcing this new coating, known as “Tapecoat-X,” Mr. Bohne stated, “As originators of pipe joint coating in tape form, we take pride in introducing this new development which offers double-wrap protection from single-wrap application. Tapecoat-X is the result of years of research to gain the advantage of greater coverage at lower costs.”

Tapecoat-X permits single-wrapping with only ½ inch overlap, in contrast to the regular method of overlapping slightly more than half the width of the tape to secure effective protection, it was pointed out.

Advantages claimed include greater coverage due to the single-wrap feature, easier application through an exclusive separator-film which facilitates unrolling and automatically disappears in the application process, savings in time and labor through faster wrapping and overall economy in material cost.

Tapecoat-X is available in rolls of 2", 3", 4" and 6" widths. Descriptive literature can be obtained direct from the Tapecoat Company, 1523 Lyons Street, Evanston, Illinois.

NEW DAMP-PROOFING PAINT SAVES LABOR COSTS

A new coating for damp-proofing and decorating exterior and interior concrete, masonry and stucco walls is being marketed by Allied Compositions Co., Long Island City, N. Y., after three years of development and job-testing. Among advantages claimed by the manufacturer, the new coating, Vaportite, saves up to...
50% in labor costs because it can be applied with whitewash brushes and requires no curing. It is said to have a service life up to five times that of ordinary waterproof paints.

Unlike paint, however, the dry and liquid elements of the product are packaged separately and mixed on the job prior to application. They consist of an inorganic setting powder and a liquid resin emulsion binder. Nine colors are available.

About a year ago the Coast Guard, in search of a waterproof paint for lighthouses and other structures exposed to severe weather conditions, began evaluation tests on Vaportite. These included actual use on two brick structures that had a long history of leaks. Results were so successful that the product was recently adopted for painting Fire Island Light, tallest lighthouse in the New York area. Long Island builders who used the coating in residential construction have also reported excellent results.

L.P.I. INTRODUCES THIN-LITE WITH NO. 70 LOW BRIGHTNESS LENS

Lighting Products, Inc., has announced that its new "Thin-Lite" series of fluorescent luminaries is now available with Corning No. 70 Low Brightness Lens. This lens is lightweight, efficient and has a very low surface brightness. It is designed to deliver maximum illumination in useful directions with brightness reduced by prismatic action in the glare zone.

The blending of this lens with "Thin-Lite" (a luminaire described as the world's thinnest shielded luminaire) results in a luminaire that is unsurpassed for beauty and quality illumination. Designed for installation where surface mounting with a bare minimum of depth is desired, "Thin-Lite" creates a semi-recessed effect. Its depth below ceiling is essentially the same as that of troffers equipped with dished plastic or glass shields. Perfectly flat sides allow the architect to build up any pattern which he may choose.

For detailed descriptions, write to Lighting Products, Inc., Highland Park, Illinois.

NEW DRAFTING LAMP REDUCES EYE FATIGUE

An entirely new and different approach to drafting board lamps is the new Faries “R F” idea which is incorporated in a new line of adjustable fluorescent flexible arm lamps now being introduced by Faries Lamp Division, Elwood, Indiana. The cigarette demonstration shows why the term “R F” means
"Reduced Eye Fatigue." A special light louvered shade permits a soft upward glow of light that cuts down eyestrain by eliminating shadows and minimizing contrasts. Six separate louvers are built into the top of the all metal shade.

The louvers increase light efficiency 30% because the dust which normally accumulates on the fluorescent tubes passes through the "RF" louvers. Another unusual feature is that each drafting board lamp extends from a minimum of 12" to a maximum of 37", a range not offered heretofore in one lamp. A total of 8 types in both fluorescent and incandescent are included. The incandescent models also have a new type "Kold" shade which is cold to the touch even after continuous burning with a 100-watt bulb. All lamps are available in two brightness engineered finishes of Silver Gray and Desert Bronze.

Recent additions to its assortment of drafting templates, which make accurate drawings of many engineering shapes and symbols to standard specifications 10 times as fast, now make the Twomey Template line the most complete available, according to the manufacturer, E. F. Twomey Co., Inc., 728 West 10th Place, Los Angeles, Cal.

Originally designed by the engineering department of Douglas Aircraft Co., Inc., these templates are now used throughout industry by architects, engineers, draftsmen, artists and many others. They conform to accepted military specifications and the standards of many of the country's important engineering firms.

The complete line includes drafting templates for electrical and electronic symbols, 3/16" and 5/16" fluid fittings, ¼" and ⅜" fluid fittings, ½" fluid fittings, ¾" fluid fittings, full-size nuts and bolts, half-size nuts and bolts, small ellipses, large ellipses, lettering, tooling, circles and sheet thickness. They are made of long-lasting, alder-coated vinyl plastic, 0.025 inches thick. Straight edges, circles, round corners, etc., add to their utility.

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accepted enthusiastically by users in all fields because of their assistance in eliminating time-consuming measurements and much tedious work," the company said. "In actual usage they have repeatedly demonstrated ability to reduce drafting time on symbols, nuts and bolts, lettering, etc., as much as 90%, freeing the user for more important and constructive designing as well as saving time, temper and money. They are available through stationery and engineering supply dealers.

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G.E. INTRODUCES NEW 20-CIRCUIT SPLIT-BUS LOAD CENTER

A new circuit breaker load center with 20 circuits arranged in a split-bus interior design has been announced by General Electric Company. The new load center was specifically developed to cope with the problem of adequate wiring in the highly electrified modern home, according to G-E engineers. The device is equipped with 100-ampere main lugs and is listed by Underwriters' Laboratories, Inc.

Nairn Miller, manager of product planning said, "Today's homes not only need more circuits, they especially need extra double-pole 240-volt circuits to accommodate electrical appliances like ranges, water heaters and water pumps, clothes dryers, and air conditioners. In designing this new circuit breaker load center, we deliberately planned for these loads by making available in the service section five double-pole branches for 240-volt electrical devices. A sixth double-pole branch feeds eight more single poles in the split section of the bus to provide ample circuits for lights and 120-volt appliances."

The new G-E center is available with fronts for either surface or flush mounting. Both types are equipped with full-length doors as standard equipment and lock kits for field installation are available. The center has a snap-action interior design that allows the interior to be snapped in or out without screws or even tools. Spring clips hold the interior securely in place when the front is off, yet the electrician can.

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dynamically new... obsoletes
all old wall brackets!

A modern building with yesterday's fixtures is like a lovely woman wearing last year's hat. McPhilben's new multi-use wall bracket the '43-40 series is beautifully honest in design... of rugged, no maintenance-needed, die cast aluminum vapor tight, versatile and competitively priced.

APPLICATIONS: Stair landings, Corridors, Lavatories and Entrances, Schools, Hospitals, Office buildings and Housing.

SPECIFICATIONS: 43-40 VT, die cast aluminum, satin finish anodized, quickly mounts to 4" cast iron junction box... for indoor application suitable for standard outlet box.

WATTAGE: Maximum 100 watt - Globe: Threaded opal with gasket. Write for Data Sheet on complete VAPORTIGHT SERIES.

DIE CAST PROTECTIVE GUARD AVAILABLE (43-44VT) for locations where protection against theft and vandalism is essential. Also available as a ceiling fixture.

1335 Willoughby Avenue, Brooklyn 37, N. Y.

UNION ASBESTOS DESIGNS TWO CONDITIONERS

The Union Asbestos & Rubber Company is introducing its first air-cooled residential air conditioner. Designated the "RA," it will be available in two and three horsepower models, and is designed to operate in connection with existing warm air furnaces. The "RA" is designed in three parts for assembly on the job, allowing builders to install it after the building is completed.

Union's new "DN" water-cooled, residential air conditioner, designed to be installed outside the home, is aimed at saving valuable floor space. The "DN" is available in three and five ton models.

Finest in face brick & tile
by HEBRON BRICK COMPANY

HEBRON, NORTH DAKOTA

NEW GRATING MADE

T-Bar grating designed for use with concrete or asphaltic filler is one of the newest products in the complete line of electroforged steel products.

Rubble Stone Company, Inc.
Natural Building Stone

Lannon - Kasota - Indiana - New York
Tennessee - Ohio - Colorado

Delano Structural Granite
Cut veneers for residential and commercial work

Copings - Stair Treads
3611 West Lake Street
Minneapolis, Minn.
Phone WAlnut 2-6262

Northwest
and interlocked grating manufactured by the Blaw-Knox Company, Pittsburgh.

Multiple advantages of T-Bar flooring cited by Blaw-Knox include (1) all forms necessary in pouring a concrete floor are eliminated when T-Bar is used because the “T’s” on the underside of the grating form a retaining surface, (2) bearing capacity is increased because the “T’s” are placed close together, (3) rugged loads can be handled because the surface is armored with the upright cross bars and bearing bars and (4) the over-all deadweight of this type floor is less than that of standard reinforced concrete.

The T-Bar panels can be made up into 3’ x 20’ sections and cut to the desired dimensions. The “T’s” used in construction may be from 1” x 1” x ½” up to 6” x 6” x ½”, according to bearing strength required for the flooring. The grating is formed by pressure interlocking.

NEW SOLAR SCREENING

A new type of solar screening offering up to 9 times greater corrosion-resistance has been announced by Reflectal Corporation, architectural products subsidiary of Borg-Warner Corporation, Chicago. An addition to the well-known KoolShade Sunscreen line, the new sun-shading device will be sold under the name KoolShade Type RS.

Despite its increased durability, company spokesmen stated that the new product will sell for about 30% less than the cost of standard KoolShade.

Greater serviceability in the new screen was made possible by the development, after 5 years research, of...
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THESE TWO
NEW BOOKS

BLUEPRINT READING
FOR HOME BUILDERS

By
J. RALPH DALZELL

146 pages, large 9x12 size, 61 plates and house plans, $5.50.

Visualization—the most important thing to learn in blueprint reading—is made especially easy for you in this treatment. Every new idea is introduced by a similar "seeing" process. A pictorial view shows you exactly what the structural section looks like . . . clear directions show you the way to look at the member . . . and a detailed architectural drawing fixes in your mind just what is meant by the various solid and dotted lines, symbols, and dimensions.

Whether you're directly in the building business . . . or do work with house plans in a real estate office . . . or simply wish to do some of your own home remodeling, you'll find this book a sure guide to reading blueprints and understanding basic structural design.

BLUEPRINT READING for the BUILDING TRADES

By
JOSEPH E. KENNEY


This book explains what blueprints are, their importance, who use them, and how to read them. It shows meaning and use of the various symbols and conventions, and how they fit into working drawings for an entire building. There is material on first, second, and third class construction, together with question and answer problems, plans, specifications, and details of actual houses for practice work, and a complete glossary of architectural and building terms.

Modernization problems for stores are dealt with, showing modern store front details. You are advised how to cube a building to determine estimated cost, and are given a wealth of other helpful information.

Northwest Architect
2642 University Ave., St. Paul 14, Minn.

a new type of plastic coating. Electrostatically sprayed (from both sides) to the bonderized steel louvers of KoolShade Type RS, this new protective coating has proved tough enough to insure up to 9 times the corrosion-resistance of oxidized bronze, up to 37 times that of aluminum. The coating was tested against salt spray, humidity, caustics, acids and impact. Like standard Kool-Shade, the new Type RS consists of tiny horizontal louvers set at the precise angle to screen out the maximum amount of solar heat and glare. In air conditioning installations, 100 sq. ft. of KoolShade screen can be calculated to replace about one ton of refrigeration equipment (at a distinct cost savings). In the uncooled structure, KoolShade reduces room temperatures up to 15°, eliminates solar "hot spots."

Complete test reports on the new product can be obtained by writing R. E. Duncan, Reflectal Corporation, 310 South Michigan Avenue, Chicago 4, Illinois.

DRAFTING BOARD LAMP ILLUMINATES ENTIRE WORKING AREA WITH 100 FOOT CANDLES

A new lamp has been perfected for lighting drafting boards which illuminates the entire working area with 100 foot candles. Called Draft-o-Lamp, this lamp provides perfect, shadowless light even on the corners of the drafting board. Four feet long, the lamp is designed for use with two 40-watt fluorescent lamps and, because of its size and power, passes the most rigid specifications of illuminating engineers. Adjustable for height, the Draft-o-Lamp clamps on the back of any drafting board, large or small, where it is out of the worker's way and does not interfere with his use of the T-square.

The lamp throws a shadowless light, free from glare. Absence of heat radiation makes for comfortable working conditions. Made with a heavy cast base, the lamp is easily installed in a few minutes. For additional information write for Bulletin 123, The Midwest Lighting Products Company, P. O. Box 536, Cleveland 7, Ohio.

PLASTIC WINDOW FRAMES

The Plyco Corporation, Elkhart Lake, Wis., the firm which reportedly pioneered the development and introduced the first molded plastic window frame unit in 1952, has recently announced the introduction of a complete new series of units designed to meet the needs of the entire building field. Mr. John O. Kohl,
They are made to the following specifications: 1¼" long, 12½ wire gauge, 098 wire diameter, ¼" diameter flat sinker head, ¼” long, sharp diamond point, 20/25 carbon content, plain finish and with definite and pronounced Fetter Rings, as illustrated, to insure the greatest holding power possible. Creeping, popping out, etc., are reduced to a minimum.

Samples, price lists, etc., available from Frank L. Robinson Company, 1429 Latham Square Building, Oakland 12, Cal.

ACE NAILS DESIGNED FOR GYPSUM BOARDS

"ACE" Gypsum Wall Board Nails, designed and manufactured to meet the physical and technical requirements of the Technical Service Division of the Gypsum Association of Chicago, are now available.

ARCHITECT
"MODULAR" MULTI-VENT DIFFUSER PROVIDES DRAFT-LESS AIR CONDITIONING

The "Modular" Multi-Vent unit shown here, patented, draft-prevention air diffuser made by the Multi-Vent Division of the Pyle-National Company, Chicago, is shown as it would appear from above an acoustical ceiling. In the completed installation, the air would be injected at low velocity from the perforated holes into the area being air conditioned. The Multi-Vent diffuser is the only air diffuser that can guarantee draftless air conditioning, particularly when a high number of air changes is required. It has been installed in "touchy" industries like drug and food production, printing pressrooms, etc.

HEAVY DUTY DRAFT CONTROLS ANNOUNCED

Two new commercial-industrial sizes, 28" and 32", have been added to both the Field Type "M" Draft Control series and the Field Type "MG" series, made by Field Control Division of Mendota, Ill.

A 14" and an 18" control have been added to the "M" line. The "M" controls are for oil and coal fired heating equipment with sizes now ranging from 6" through 32". The "MG" controls are for gas fired equipment, with sizes from 8" through 32".

Field Controls in these new sizes...
are of extremely heavy duty construction in keeping with the heavy duty breechings required for commercial use. The 32" model weighs 140 pounds net, employing heavy gauge steel and welded construction to assure long and trouble-free service under heavy use.

The new Field models feature a stainless steel knife-edge bearing on the 28" and 32" models to eliminate the risk of corrosion and assure sensitivity of the gate under prolonged usage. Other common features of both the "M" and "MG" controls are side wings, extended housing, gates factory-balanced to offset any variations in steel thickness. And because, like all Field Controls, these are round, they can be levelled even on a sloping flue.

In connection with the new commercial-industrial sizes, Field Control Division is issuing a technical folder to serve as a guide to architects and engineers in selecting and specifying controls in this size range.

GRIPPING IN U.S.

The Grip spring, an important new machine element recently developed in Germany, is now being manufactured and marketed in the United States by the U.S. Automatic Corp.

It offers a completely new approach to the problem of fastening hubs onto a shaft without the use of splines or keyways. The key and keyway have been used for hundreds of years but have always been a source of trouble because clearances must be provided between the hub and shaft in order to make assembly possible. Extreme-
ly close tolerances may reduce the clearance but harmful vibration cannot be eliminated. Shrink and press fitting assemblies have disadvantages of high cost and impractical disassembly.

The Gripspring provides an assembly which has all the advantages of a shrink fit without any of its disadvantages for no clearances are present in a Gripspring assembly. The new device is wedged between hub and shaft under (heavy) pressure made by easy to use and handle hand tools. The outer ring expands and the inner ring contracts. Gripsprings are said to transmit the maximum torque for a given shaft diameter because full strength of both hub and shaft is utilized.

Engineering advantages present users credit Gripspring with maximum torque due to utilization of full strength of hub and shaft, elimination of stress concentrations and notch effects, no relative motion, backlash play and hammering, concentricity depends on Gripspring rather than hub and shaft, easy to assemble and disassemble, eliminates costly machinery and hand-fitted assemblies, grinding usually can be eliminated, permits use of smaller diameter shafts and hubs, less space and weight required, hermetically seals hub to shaft, no fretting or corrosion, perfect seal against air and liquids and lower cost.

Gripsprings are manufactured and distributed in the United States by the U.S. Automatic Corp., Amherst, Ohio. Descriptive literature and present use prints are available.

INSTITUTIONAL BASKET OF DURABLE FIBER

The new Vul-Cot Junior is a small, attractive waste receptacle designed especially for hotel, hospital and institutional use. It is available with either round or square tops. The round top style has a 10-inch top diameter, tapering to an 8-inch bottom diameter and is 12-inches deep. The square top style has the same dimensions. Vul-Cot Junior is fabricated from hard, smooth, durable vulcanized fibre. The result is a strong, yet lightweight receptacle, quiet in use and having no rough edges to mar furniture or snag clothing. The Vul-Cot Junior is available in maroon-brown and olive-green natural colors, while sprayed lacquer finishes can be supplied to harmonize with interior decorations.

Guaranteed for five years, Vul-Cot wastebaskets often last 30 years or more. Users report these vulcanized fibre receptacles don't dent, crack or splinter. A new data sheet can be had from National Vulcanized Fibre Co., 1055 Beech Street, Wilmington 99, Delaware.
SLANT-FIN RADIATOR ANNOUNCES NEW BASEBOARD

Two new heating elements and a new cover assembly, designed to meet the current demand for efficient residential baseboard heating, has just been announced by Slant-Fin Radiator Corporation, Richmond Hill, N. Y.

The new heating elements, Slant-Fin BB-1 and BB-2, augment the company's standard line of baseboard units for steam and hot water heating systems. The BB-1 element combines 1" nominal copper tube with aluminum fins for high capacity output. BB-2 elements are fabricated of 1" nominal copper-bearing tube with steel fins.

"According to all available figures" its makers said, "it is the lowest priced radiator per square foot, in the industry. Use of the 1" diameter tubing permits longer, more economical series loop installations. The I B-R approved high capacity ratings result in substantial material savings since less linear footage is required. Both elements are furnished in stock lengths of 2', 2½', 3', 4', 5' and 6', which saves on-the-job labor costs."

The new cover assembly, Slant-Fin Type "A," has been designed to provide a functional, modern enclosure for either of the new heating elements. Factory welded support brackets reduce installation time and labor. Components are simply snapped into place.

For informative literature, write for Bulletin R-602 to Slant-Fin Radiator Corp., 87-49 130th Street, Richmond Hill 18, New York.

U.S. STEEL HOMES FEATURE "PERSONALIZED CORONADOS"

During the Labor Day weekend more than 200 "Personalized Coronados" were opened throughout the country by United States Steel Homes dealers as part of a national family-living promotion. This variation in prefabs is another challenge to architect-designed singles.

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“Personalized Coronados are proof that the moderate-cost, factory-built home can be adapted to meet the individual tastes and needs of the American family,” according to D. F. Rucks, Jr., vice president-sales. "They can be personalized in 100 ways through variations in floor plan, color and architectural treatment."

United States Steel Homes will build traffic for its dealers through a $350,000 advertising campaign, including four-color advertisements in national consumer magazines, commercials on the United States Steel Hour, a 1050-line newspaper advertisement for each participating dealer.

Manufacturers participating are tying in with national and local advertising and point-of-sale displays. Participants include such brand names as Allianceware bathroom fixtures, Arco paint, Philip Carey roof shingles, Fenestra steel windows, Hotpoint appliances, Markel lighting fixtures, Mor-Sun furnaces, Permaglas water heaters, Steelcraft sliding closet doors, Thermopane window walls, Van Packer chimneys, Veos ceramic-on-steel wall tile, Yale locks and hardware and Youngstown kitchen cabinets.

**KURTZON'S NEW DOOR STOP LINE IN 21 COMBINATIONS**

A new line of solid metal door stops has been added to the builder's hardware products manufactured by Morris Kurtzon, Inc., 1420 S. Talman Ave., Chicago 8, Illinois. The line includes seven different finishes with three attachment choices, making possible 21 combinations to fit most any building requirement.

A high quality line, they are sturdily constructed of solid brass, bronze and aluminum, all rust-proof metals. The rubber tip is cemented and screwed in to prevent loosening even under the hardest usage. Simple and conventional in design, they blend well with any contemporary architecture. The natural colors of the metals accurately match other building hardware. Finishes are natural polished aluminum, satin and polished brass, satin and polished bronze and satin and polished chrome. Attachments are for use in wood or concrete.

**NEW BULLETIN DESCRIBES HIGH TEMPERATURE WATER GENERATORS**

International-LaMont Forced Recirculation Generators for high temperature water heat distribution systems are described in a 10-page Bulletin, No. 700, just released by...
The International Boiler Works Company.

This bulletin describes not only the specific features of these forced recirculation generators but cites some of the advantages of high temperature water systems which are rapidly gaining acceptance throughout industry.

Copies of the Bulletin are available upon request to The International Boiler Works Company, Palm Street, East Stroudsburg, Pa.

Development of a new adsorption type, heavy duty dehumidifier suitable for use in factories, warehouses, storage vaults and other large areas where controlled humidity is desired was recently announced by the Dryomatic Corporation of Alexandria, Virginia.

The Dryomatic T-150 is an automatically regulated dual-tower unit, using silica gel as the drying agent. It is designed to maintain humidities as low as 10% in areas up to 60,000 cubic feet over a wide range of temperatures. The machine has a dry air output of 150 cubic feet per minute and is capable of removing four to five pounds of water per hour. The regeneration of the silica gel is accomplished automatically by electric heating elements.

The machine features a newly designed motor-operated four-way valve which alternately directs the air from one silica gel tower to the other. As one tower is regenerated the other continues to dehumidify, thus providing a constant flow of dry air. A further novel feature is the use of thermostats for control of the regeneration cycle, thus making the machine self-adjusting to atmospheric conditions.

The unit requires only standard electrical outlets and a minimum of duct work. It is compact and can be mounted on casters for easy relocation. Built-in or remote humidistat control can be provided for completely automatic on-off operation.

The unit measures 51x28x44" and weighs approximately 400 lbs. It is finished in light gray enamel and tentatively priced at $1,160 f.o.b. Alexandria, Va.
NEW DIXIE FITS VARIOUS BUILDING DESIGNS

The new Dixie modular gas range units, including fully insulated oven and counter top burners, offer builders and architects maximum arrangement latitude in modern residential construction. Typical installation is shown here.

SMALL COMMERCIAL REFRIGERATOR DESIGNED

Designed to fill the need for a quality refrigerator at moderate price for small restaurants, schools, industrial and institutional cafeterias is the Reach-In, a product of Nor-Lake, Inc., Hudson, Wis.

The model illustrated has a net capacity of 28 cubic feet, while other models are available in 22 and 18 cubic foot sizes. An additional feature is the automatic defrosting unit which uses a special moisture evaporator and does not require a drain connection.

Interiors are constructed of embossed aluminum and the three adjustable shelves are of stainless steel for easy cleaning. The refrigerator is available with exterior of either stainless steel or white baked enamel over heavy gauge cold-rolled steel. All hardware is chrome plated and insulation of high density Fiberglass is said to lock in the cold air.

NEW STYLE THERMOSTAT HARMONIZES WITH ALL INTERIORS

A newly designed household thermostat is announced by Detroit Controls Corporation, Detroit, Michigan. Known as the "Classic," it combines functional utility with modern styling, yet the clean simplicity of its design blends with any period of interior furnishings.

ARCHITECTURAL WOODWORK

For Quality Workmanship
From Established Craftsmen

NORTHWESTERN SASH & DOOR CO.
Fergus Falls, Minnesota

Nor-Lake heater strip, installed around the door opening, prevents condensation, the manufacturer reports. To eliminate danger of pilferage when installed in open areas, the unit is provided with a keyed lock. For additional information, write Dept NC, Nor-Lake, Inc., Hudson, Wis.

SPECIAL SIZE SHELVING at the price of standard

When your plans require steel shelving of a special size to fit a specific use, call Neubauer. No extra charge is made for sizes in odd or fractional measurements. Tell us what you need and we'll furnish a custom built shelving job to your specifications at the price of standard.

Call us at GGranville 5841 or write for Shelving Catalog.

NEUBAUER MFG. CO. 2023 Central Ave.
Minneapolis 18, Minn.
Departing from conventional design, the dial on this new thermostat is horizontal, tipped at an angle which makes direct eye-level viewing possible and eliminates inaccurate reading caused by "angular vision." The long thermometer is placed just above the numerals under a lens and shows at a glance how actual temperature compares with the thermostat setting. A small lever located just under the dial face adjusts room temperature at the touch of a finger.

Another feature of this thermostat is Detroit's "Timed Cycling" action. "Timed Cycling," pioneered by Detroit, automatically cycles the burner to maintain temperature constant to within a fraction of a degree. It is stated by the manufacturer that by eliminating overheating and under-heating, savings in fuel costs are effected.

The "Classic" is available with either the three-wire parallel type heater as used by Detroit Controls for many years or with an adjustable series heater with a range of from .4 to 1.0 amperes.

A companion thermostat, the "Duo-Classic," for use in homes equipped with year 'round air conditioning, is also manufactured by Detroit Controls. This thermostat has the same modern styling, though slightly larger in size.

**NEW GENUINE HARDWOOD TABLE TOPS HIGHLY RESISTANT**

A cigarette can burn completely to ash without damaging hardwood table, bar and desk tops made by a newly developed process offering super-resistant genuine hardwood surfaces that can be finished in any color or finish effect at the same time, and right along with the rest of a furniture piece, according to information from the Fine Hardwood Association.

Tests abused the surfaces far more than consumers are likely to. For example, in the alcohol-proof tests, pure 100-proof and even unlikely-to-be-spilled 190-proof alcohol were used in addition to the standard whiskies, without surface marking occurring.

"This new type of hardwood surface, which offers a substantial price advantage over high-pressure laminates, can be made by the furniture manufacturer in his own plant at the same time as the rest of a furniture piece and using the same veneers and woodworking tools he used in his regular manufacturing operation," the association said.

These new, virtually abuse-proof, genuine hardwood surfaces are made possible by a combination of approved finishes and a process of laminating aluminum foil into hardwood plywood construction. The burn-resistant qualities of this type of construction have been known for several years. Problems of manufacturing, and lack of a variety of suitable surface finishes, have, however, prevented its wide application. The research of the last couple of years has concentrated on developing a

---

**The Backbone of STEEL**

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- Genuine Dur-O-wal is electrically welded of high tensile steel; trussed design assures horizontal and vertical reinforcing for block, brick and tile walls. Assure lasting beauty with time-tested Dur-O-wal... available everywhere. Insist on Dur-O-wal.

- Dur-O-wal, laying flat... works fast... handles easily.

- Dur-O-wal reinforcing wins the praise of the man with the trowel.

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WATER WELLS WATER TREATMENT VERTICAL TURBINE PUMPS

Emergency Repair and Service

LAYNE-MINNESOTA CO.

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Minneapolis, Minnesota

ARCHITECT 85
wide range of suitable finishes and fool-proof methods for permanently bonding the aluminum foil to the wood layers in both cold and hot-press operations.

The process of laying up the special burn-resistant hardwood plywood, as finally perfected, is simple. Two special pre-coated aluminum foils, developed for each hot-press and cold-press plywood, have eliminated former production headaches.

A variety of finishing schedules can be used. The manufacturer can offer any color of finish using stains, fillers or pigmented toners with any degree of gloss or rub. Furniture can have a very high gloss, a soft-looking, dull patina or one of the new open-pore "in-the-wood" finishes.

In addition to the great design versatility and cost-saving compared to synthetic burn-resistant surfaces that do not offer the beauty of genuine wood, this new hardwood plywood surface permits the use of a plant's standard woodworking equipment, whereas synthetics cause trouble even with special carbide-tipped saws and other hard-steel tools.

Complete test results and instructions for fabricating these new highly resistant genuine hardwood panels are available from the Fine Hardwoods Association, 666 Lake Shore Drive, Chicago 11.

NEW TYPE ROLLING GLASS HARDWARE

Designware Industries of St. Paul, Minn., is now producing an entirely new type of glass hardware for china cabinets, bathroom and vanity cabinets, display and show cases for both home and commercial use. Stylinmark hardware is extremely simple in design and features whisper-silent rolling action. Glass doors ride in extruded aluminum shoes equipped with press-fit Nylon wheel assemblies that roll silently on raised, removable rails. All shapes are of extruded aluminum and are furnished in natural, anodized natural or in eight anodized decorator colors.

BUILD WITH NATURAL STONE

- BEDFORD CRAIGMAR
- PANETTI LANNON NEW YORK BLUE
- HARVEST HILL COLORADO
- CARThAGE MARBLE ARIZONA
- GREY TENNESSEE CRAB ORCHARD
- MINNESOTA STONE ARKANSAS

USED BRICK

Gopher Stone & Brick Co., Inc.
150 Irving Ave. No.
Minneapolis, Minn.
• Atlantic 6209 •
Stylnark hardware is available in two types—"Picture Frame Style" featuring a stylized frame that contains all hardware outside of the cabinet area, leaving maximum storage space within the cabinet (this style completely finishes off the wall opening, no trim or extra molding is necessary) and "Channel Frame Style" designed to be used with wood frames and may be full inset, partial inset, full face or full surface mounted. Several different types of installations can be made by alternating and interchanging component parts.

Both styles of Stylnark hardware are available in 12 ft. stock lengths. The factory will also prefabricate frames ready for installation in any size specified. Complete information is available through leading glass outlets or directly from Designware Industries, 464 Roy Street, Saint Paul 4, Minn.

STEELCRAFT DESIGNED TO SAVE TIME

Built to stand up under the service conditions of institutional, commercial and industrial buildings, Steelcraft Hollow Metal Doors are said by their makers to be engineered specially for buildings where sound-retarding and fire-resistant qualities are an important consideration.

"Without sacrificing quality, the pricing of these products is low because they are being produced on the modern assembly line production plan," said The Steelcraft Mfg. Co., Rossyoynce, Ohio. "They are precision-built, combining appearance with long lasting, trouble-free service."

The doors are factory-fitted in frames, eliminating all field cutting and fitting—a saving in installation time. They are completely mortised and machined ready for quick, easy attachment of all necessary hardware. In addition to hinges and locking devices, furnished with door, Steelcraft is reported to have a complete line of accessory hardware to meet special conditions. Available in panel or flush type with a wide choice of glass and solid panel arrangements, the doors are painted with a baked-on primer, ready for field painting.

A NEW, COMPLETELY AUTOMATIC BEST COFFEE MAKER NOW BEING DISTRIBUTED NATIONALLY

A completely automatic, electronically controlled "push-button" coffee maker designed to reduce brew-
ing costs and save labor time by up to 90% is now being distributed nationally by Best Products Company, 2618 West Addison, Chicago 18, Illinois.

The new “Best Automatic Coffee Maker” was designed and perfected over a period of eight years. The entire brewing operation is completely automatic. After the push button is pressed, the machine requires no further attendance by the operator. The heating is completely automatic. The heat goes on when the temperature drops 5 degrees and goes off when the temperature has been restored. Low streamlined design of the Best Coffee Maker facilitates the brewing process and cleaning, and eliminates the need for boxes, stools and ladders which frequently cause accidents. A simple flick of the switch permits coffee brewing manually at any time.

JANITROL UNIT HEATERS FIRST WITH SPLIT CAPACITOR MOTORS

A new design that improves the operation and lower maintenance on the larger capacity Janitrol gas-fired unit heaters has been announced here by Janitrol Heating And Air Conditioning Division of Surface Combustion Corporation. Permanent, split capacitor motors are now offered on all heaters of 175,000, 200,000 and 225,000 BTU capacity. These unit heaters are the first propeller-type gas fired heating units with this latest type, constant speed permanent split capacitor motors to be manufactured in the United States.

Greater dependability of operation and lower maintenance cost are expected to result with the new motors, as the conventional split phase motor starting mechanism is eliminated. Failures in the starting mechanism of split phase motors used formerly was a major cause of service calls.

Normal variations in electrical current voltage do not adversely affect the motor speed, with the result that volume of air delivery remains constant. All motors are equipped with built-in thermal overload protection.

SMITHCRAFT ANNOUNCES NEW TWO-FOOT-WIDE TROFFERS

The development of a new line of two-foot-wide troffers, designed to provide an outstandingly modern, trim and “clean” ceiling effect, has been announced by Smithcraft Lighting Division, Chelsea 50, Mass. One of the outstanding features of the new 24” troffer is that there are not catches, latches, hinges,
Because of the precision manufacturing of the new 24" troffers, light leaks are completely eliminated, and the entire lighting surface is free from shadows from any interrupting cross members. Further information can be obtained by writing Smithcraft.

The Final Word:

... Attend your St. Paul convention.
... Follow up by being at chapter meetings.
... And be an active participant.
... Send Northwest Architect your ideas for stories and how to improve the magazine.
... Keep up on what goes on in architecture.
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<td>Paper-Calmenson Co.</td>
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<td>Zenith Concrete Products</td>
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<td>Zonolite Co.</td>
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Here's why architects specify **COFAR and CORRUFORM**

**COFAR and CORRUFORM**

**THE REINFORCEMENT THAT FORMS**

COFAR, a deep-corrugated steel sheet with T-wires (transverse wires) welded across the corrugations performs the dual function of reinforcing and forming concrete slabs. All Cofar units are cut to fit the building frame and are ready for immediate placing upon arrival at the job site.

COFAR placing follows directly behind structural steel erection. Weighing only 2 lbs. per square foot, Cofar sheets are easily handled. Sheets interlock by a one corrugation sidelap assuring a tight form for concrete. In position, they provide a safe, unobstructed working platform for construction activities.

**CORRUGATED STEEL FORMS**

**ECONOMICAL** Corruform eliminates waste. Light rigid sheets quickly placed won’t bend, sag, stretch, or leak. The concrete you save actually pays for CORRUFORM. Clean-up time and expense are minimized, too!

**SAFE** Corruform provides an extra-tough, secure steel base for trades and concrete... a form which maintains structural principles and integrity, with no side pull on joists, beams or walls.

**DURABLE** Corruform is nearly twice as strong as ordinary steel of equal weight. It’s an ideal vapor seal, too! With coated Corruform, insulating slabs serve better, last longer.

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BEAUTIFULLY-GRAINED PALCO REDWOOD CLEAR HEART FLAT GRAIN PANELING was used extensively on the Redwood Terrace, the Twin Cities' largest supper club, located in Shakopee. Shown above is the lounge featuring a pleasing combination of redwood, brick, brass and wrought iron.

PALCO REDWOOD shrinks and swells less than any other wood; costs less than pine and has a natural warm color. Use PALCO REDWOOD liberally for either interior or exterior design.

Above, left, check room, paneled in Palco redwood. Note redwood overhead grillework, making a low ceiling which in itself builds a distinct area. Above, right, vertical redwood floor-to-ceiling louvre separating dining area from hall leading to non-restaurant space. Redwood grillework also used over hallway.

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