BUILDDEX LIGHTWEIGHT STRUCTURAL AGGREGATE IS USED FOR A FIRE RATED DESIGN IN THE SOUTHWESTERN BELL OFFICE BUILDING IN KANSAS CITY, MISSOURI

CREDITS:
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This issue concerns itself with the nitty gritty of architecture - the research, the planning that is required to determine how best to put materials together to support the structure, or enclose or enrich space, or how to make the building WORK. The degree of thoughtfulness exercised by the architect in these little "petty" details often measures the success of a building as architecture.

We as architects often tend to blame poor workmanship, inexperienced mechanics, the ravages of time, and other elements for leaking roofs, cracked walls, and other failures in our buildings. And while these factors certainly are problems to be confronted, the architect who best represents our profession is one who has a realistic understanding of the processes of construction, the capabilities and limitations of its craftsmen and who understands the effect of people, time, temperature changes, moisture variations and a wide range of other subtle forces that act on buildings, and who then designs his details to accommodate the forces of nature and failures of man.

The drawings and photographs featured in this issue only scratch the surface in showing how the architect thinks thru and visualizes how the materials are to be fabricated and assembled long before the workmen in the field receives them. The architect has tried to simplify the assembly to the point the workman needs only to follow the instructions (complex though they may be) and the buildings will work.

We are especially pleased to print in this issue the late Harris Armstrong's very personal article on detailing. He illustrated his points well with anecdotes and drawings, giving us the kind of article this magazine should feature more often.

Next Issue

The February issue will be our annual Directory Issue. In addition to a simple listing of names and addresses of MCA members, we would like to publish recent portraits of all members. We are also seeking other biographical information that would serve as a basis for a feature article about the architect's involvement in his community. All members of the Missouri Council of Architects are urged to send this official portrait (must not be more than five years old), billfold size, to their chapter editor with proper identification, by January 10, 1974.

This issue will receive a larger than normal distribution and it would be to the best interests of each MCA member to fully cooperate with their chapter representatives to get the photos in early.
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ABOUT THE COVER
This issue's cover depicts, in an abstract manner, a detail from the Troop House at Camp Crossed Arrows. The original detail is shown on page 15.
detailing: the final finish of architectural design

By Harris Armstrong
F.A.I.A.

Architectural detail bears the same relation to architecture as the plaid bears to the tartan. A plain wool cloth would keep the Scotsman just as warm but it certainly would not be a kilt! Detailing is the final finish of architectural design and must be considered as a facet of design and not as something which can be added to a building to make it more attractive.

In the modern skyscraper let us consider for a moment the problem of detail as it relates to the John Hancock building in Boston. There is no doubt that the detailing of the sash sections is one of the contributing causes to the glass blowing out of the building just as faulty detailing of sash sections was responsible for the water leaks in the U.N. Headquarters in New York some 30 years ago. The U.N. was finally solved with thikol and doubtless a solution will be found in Boston, but the requirements of architectural design on the part of the pioneer architectural designer often outstrip known techniques of detailing. Incomplete analysis of the problem can lead to errors which may involve hundreds of thousands of dollars.

These dangers lead many architects to use only the most pedestrian solutions to their problems and this approach is safe from the inherent danger which always accompanies the pioneer in his journey into the unknown.

Modern architecture as we know it does not rely on architectural ornament to express the design of a building in the way that Louis Sullivan's Wainwright building uses ornament. The Wainwright has no ornament on its massive base with its clean-cut opening. It does have ornamental spandrels between clean brick piers in order to articulate the design of the vertical shaft. The attic story and the great cantilevered cornices is richly ornamented with Sullivan's own very individual enrichment based upon plant forms, which separates this element from the other two portions of the design. This efflorescence of ornamentation is of course the great crowning element of the whole design. It is useful in considering detail to consider how the pioneers enriched their buildings. Frank Lloyd Wright showed a great appreciation of plant materials as a foil for the simple masses of the masonry, and so in order to integrate the plants further into the design he used massive architectural planters which were an extension of the actual walls of the building. These planters extended out from the building to receive light, air and water. I sometimes wonder what if anything is going through the minds of architects who build planters under eaves and in dark corners of buildings.

Speaking of living plants as details of architecture which have become such an important part of interior design, they fill a need for enrichment, a softening, humanizing element to relieve the uncompromising austerity of the Barcelona chairs, the wall to wall carpeting, and all the rest of the furnishings which have accompanied the International School of architectural design.

To return to pure architectural detail for a moment, an understanding of the nature of materials is of the greatest importance. The nature of wood is to rot if constantly wet. The nature of steel is to rust if exposed to the elements. The nature of concrete is such that it must be mixed and placed under exactly controlled conditions if it is to remain relatively permanent, and even then it should be protected from the ravages of freezing when wet by a renewable coating. There are few materials as permanent as glass, but it, too, will show structural deterioration due to uneven temperatures caused by part shake, part sun, and so it goes. Each material must be understood and each used with appreciation of its inherent
This cross section drawing shows the planning of the insulation of the interior of the aluminum mullions to permit adequate humidity without condensation on the inner surfaces of the aluminum.

At the right is the St. Louis Magic Chef building that incorporates three different building materials—glass walls, limestone walls in the office areas and unrelieved brick for the mechanical elements and vertical circulation at the end.

The Shanley Office Building in St. Louis (above) offers several examples of detailing as stressed by the author. At the left is a detail of the steel column base and curving top which expresses compression and strength at the base and continuity at the top. The steel was cast into the concrete with continuous half inch plates welded to the column flanges cast into the concrete. At center is a detailing of the stucco slab fence surrounding the courtyard that is held vertical and free of the earth, thus eliminating a continuous foundation wall. At the lower right is Architect Armstrong's detail of how he solved the problem of moisture between double panes of glass before the development of Thermopane glass.
limitations.

Since all man made constructions will eventually erode away and return to the earth, all we can hope for is relative permanence. The permanence of the Washington monument with its pyramid of cast aluminum at its apogee, or the permanence of the St. Louis Saarinen Arch with its continuously welded stainless steel sheathing are examples. These monumental structures should be relatively much more permanent than the hollow inhabited buildings with which most of us are concerned.

But building for man’s use is our profession and our compelling interest. It is for these reasons that architectural detailing is important. Much of the creativity of architectural detailing has been taken out of our hands by the development of all manner of mass produced parts. These make much of architectural detailing merely a matter of assembly. However, I believe that an understanding of architectural detail is basic if architecture is to continue to develop.

It is the architect who is the leader in the building industry and it is the architects who design those rare buildings that constitute the actual break-throughs. These buildings must be properly detailed or a great hue and cry will be set in motion for the scalp of the offending architect. I speak with some knowledge of this phenomenon.

What I would like to do at this time is to give some illustrations of architectural details which are from my own work. I am using my own buildings because I know them so well and can think back to the happy years when these techniques flowed so easily as a natural part of preparing the working drawings. Most of them are from the Leo Shanley Orthodontic Office at Bemiston and Maryland Avenues. and I have prepared details showing some of the things I shall mention.

Thermopane had not been developed but it was known that two layers of glass were better than one so far as heating and cooling were concerned. It was also known that the space between the sheets of glass would become fogged with moisture if ordinary construction was used. When the air between the sheets of glass was heated it would expand and some of it would be forced out. It could pick up moisture and when the air between the glass cooled this moisture laden air would be drawn back into the space. The moisture would settle on the inner surface of the glass and eventually cloud it to an objectionable degree. The sill detail for double glass in this building allowed the space between the glass to be free of unequal pressure because it was connected by a free air passage in a metal tube in which the circulating air passed over a tray of calcium chloride. This extracted the moisture from any air entering this space.

This system has been working for 35 years with occasional replacements of the calcium chloride.

The stucco slab fence which encloses the entrance courtyard is supported and held vertical and free of the earth, thus eliminating a continuous foundation wall, by being suspended and supported on 8" galvanized steel bar joists as shown on the detail. I might add that all steel cast into concrete was galvanized.

In the handrail and column drawing, I wish to point out a few details which are not standard practice but do clean up the appearance of the steel. Although job welding is more trouble than bolts, the end result often justifies the effort. When a building is as bare of ornament and texture as the Shanley Building, the care with which parts are assembled becomes more important. This justifies the steel column base and curving top which expresses compression and strength at the base and continuity at the top. The placing of the column outside of the concrete beam was another example of continuity. The steel was cast into the concrete with continuous half inch plates welded to the column flanges cast into the concrete. The steel railing supports were cast into the same beam and were designed so that surface water was led down the steel to drip off of the bottom and not rust streak the concrete. Forgive these lengthy descriptions but I believe them to be necessary for those readers who might feel that these techniques were not worth the trouble, and they may be right, but anyway they were the reason! The logo I still use, and I am getting royalties on the corner former.

I have used a few small photographs more as an aid in locating the building than as illustrations but they may assist a student in finding the buildings should he wish to examine the actuality.

The Magic Chef Building just...
We have the electricity, but you have the power.

In spite of the current energy crisis, Kansas City has an adequate supply of electricity. We hope we always will. Still, there are definite advantages to conserving electricity. Saving money, for one. Saving resources, for another. You’re in complete control of the electricity you use. We’d like to suggest you use it wisely.

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At present, we have all the electricity you need. But you have the power to decide how it’s used.

The Power & Light People

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North Kansas City office
400 Armour Rd., North Kansas City, Mo.
Overland Park office
8730 Nieman Rd., Overland Park, Ks.
Paola office
101 W. Ottawa, Paola, Ks.
Brunswick office
100 W. Broadway, Brunswick, Mo.
Glasgow office
705 Washington, Glasgow, Mo.
Sweet Springs office
317 Miller St., Sweet Springs, Mo.
and across from Central Hardware has three principal functions which were expressed on the exterior of the building by three different materials. The first floor display room with its glass walls, the offices with their limestone walls and the vertical circulation at the west end of the building in sheer unrelieved brick are the three materials of which I refer. The decision to use these materials was a matter of design, but the jointing of the masonry and the scale of the glass was all a part of the architectural detail as was the integral insulation of the interior of the aluminum mullions in order to permit adequate humidity without condensation on the inner surfaces of the aluminum. In other words it takes just as much knowledge to properly detail a building as it does to design it, and one of the great advantages of a small office is that the designer does not live in an ivory tower but is concerned with the total aspect of the building and must participate more fully than is possible in a vast organization of specialists.

Recent invasion of the residential field by west coast cliches such as the mansard roof have very little actual justification unless it is to create the illusion of a lower cornice line. But if this is the reason, why select a black roofing material? Why not use one that would at least tend to merge into the sky at times?

Another recent cliche in this field is the double entrance door. I can find no reason for this unless it is to make the ranchburger have some of the trappings of a French Chateau—a thing that it can never be nor should it try.

While speaking of entrance doors for residences, the machine made slab door is the lightest, most stable warp-free wood door that has ever been produced and to my mind should look like what it is. It may be painted, or varnished, or veneered with a more permanent material such as sheet bakelite or formica but it should not have false panelling moldings or machine carved ornamental planks or other material hung on to it to make it appear to be what it is not. In other words, once again the old adage holds true: “Honesty is the best policy.”

It is my current belief that the age of the all glass building is drawing to a close as the energy crisis is better understood; and while double insulated reflective glass does eliminate much of the energy loss, and the reflective walls do tend to merge with the sky or the environment in a very beautiful way, we shall have to recognize the realities of our use of energy here in America in relation to the rest of the world. And as the world moves toward ever greater industrialization, we must not continue on our present destructive path into the twenty first century. All of this is of importance to architecture, architectural design, architectural detailing, and finally architectural philosophy.
The Mason Contractors Association of Greater St. Louis has prepared this useful book to assist architects in comparing the many different types of masonry walls.

The Cost Index is a valuable tool for anyone interested in the economics inherent in masonry construction.

To get your free copy, call or write Bill Pautler, Executive Director of the St. Louis Masonry Development Trust.
Office-Warehouses
Kansas City, Mo. Area
Peckham-Guyton, Inc., Architects

A job-site precast tilt-up wall system jointly developed by the architects and Linclay Corporation is being used on several office-warehouses and display-warehouses. Wall panels are cast flat on the floor slabs using metal or fiberglass form lines for the ribbed sections and wood strips for the rustication joints. Anchoring devices, inserts, and metal frames for door and window openings are set in place in the forms before the 4,000 PSI concrete is placed. After the wall panels have been erected, the exterior surfaces may be left as they are or given a sand blast finish, with a light texture on the ribbed sections and medium or heavy texture on the smooth sections.

Grout Solid
20 ga. Galvanized Sheet Metal
Ribbed Textured Sandblasted Finish

R. T. French Co.
Office, Processing Plant and Warehouse
Springfield, Mo.
Peckham-Guyton Architects

A 4'-0" concrete curb wall around the perimeter of the building provides the necessary fork lift protection on the interior and acts as a retaining wall for the earth berm on the exterior. Utilization of the earth berm is two-fold: (1) to provide adequate frost protection with a minimum amount of concrete foundation wall; and (2) to create an earthen platform for the expansive warehouse structure thus giving a low profile sympathetic to the land.
Passenger Terminal Building
Kansas City International Airport
Kivett & Myers, Architects

The terminals are circular in shape. Their basic structural elements are a pair of intersecting concrete frames. These frames span diagonally from the air side to the land side of the building, intersecting in the middle of the span, and cantilevering an additional 31' to form a canopy over the area between the roadway and the building. The framing system selected is a conventionally reinforced, cast-in-place concrete frame. It features 12-foot wide columns and a deep haunch for a bold architectural appearance. This appearance also is carried out in the roof which is a super-waffle slab with diamond shaped pans approximately 10' on a side. Because of the building's circular shape and intersecting frames, there are 16 different size pans in the roof.

Regional Headquarters
Southwestern Bell Telephone Co.
Kansas City, Mo.
Kivett & Myers, Architects

Approximately 2,300 precast concrete panels, composed of gray cement and Kaw River gravel, finished as "retarded aggregate", in various sizes used in the following manner: spandrels, mullions, sills, flat wall panels, column covers and coping panels. Deep set windows were formed by separate precast concrete column covers, sloped spandrel sections and separate mullion pieces. Recessed bronze glass completed this element of the exterior facade. Maximum sun control was achieved by these sculptured panels.
D. W. Newcomers & Sons, Inc.
White Chapel
Kansas City, Mo.
Metro Architects, Inc., Architects

This return air detail was used along an entire wall instead of four return air grills located in the floor. It provides an even circulation of air elimination noise and drafts. Polystyrene placed inside the channel while the floor slab was poured kept the opening free and was easily removed later. The wood trim at the base provides a shadow concealing the opening. Returning air flows into the opening below the wood trim, down along the inside face of the channel, and into the plenum space below the metal deck.

Central Area Facilities
Kansas City International Airport
Kivett & Myers, Architects

The Department of Aviation administrative facilities, located on a double concrete pedestal and clad with acoustical insulating and reflective solar bronze glass, contain 11,000 square feet of offices. The architectural design objectives were to utilize materials consistent with the overall airport development and develop a strong visual image for the central portion of the complex. A continuous precast concrete berm was utilized to form a base and screen for the various utility and office facilities which were programmed for this complex. The simplicity and formality of forms and proportions were maintained to avoid visual conflicts with the vehicular information system and the passenger terminal buildings located around the Central Area facilities.
This illustrates how much exuberance is imparted to the overall design of a building by a relatively simple detail—the balcony railing which is curved both in plan and in profile.

A structural system of crossed poles was designed for this troop house to provide a unique interior space economically and to employ materials consistent with its rugged natural setting. The poles were cast in concrete and bolted together at the crossing points to provide a rigid frame.
Pre-Cast Columns

An impressive example of the research and development work in materials and construction methods for KCI is a sample, pre-cast column that looms on the horizon as one enters the construction site. The column, built to scale but cut off at a 23-ft. height for purposes of the research, is typical of 246 such columns which created the basic module structures for the three terminal buildings. For an investment of $6,000 in the sample column, the airport planners estimate they eliminated many construction problems, determined in advance the look and feel of the structures—and saved some $125,000 in costs. The column was built to pre-test construction techniques, amount and position of reinforcing steel, and for the colors and textures of the concrete. Six concrete textures and four design mixes were used for evaluation by the planners.

bull shoals contract

The U. S. Army Corps of Engineers recently awarded a contract to R. W. Booker & Associates, St. Louis, for the preparation of an updated master plan for recreational development and management of the Bull Shoals Lake located on the borders of Missouri and Arkansas.

The work will include reviewing existing use of the lake and Corps-controlled lands, reviewing and replanning 17 existing recreational sites, and planning the expansion of four sites and one new group campsite.

The Booker organization has done similar work for the U. S. Forest Service in Clark National Forest in Missouri and for Cave Run Reservoir in Daniel Boone National Forest in Kentucky.

EDWARD A. SCHILLING has joined R.W. Booker & Associates, Inc., St. Louis, Mo., as senior architect. He formerly was architect-in-charge for the Drake Partnership, Architects, Inc., also of St. Louis.

THE KANSAS CITY architectural firm of Frangkiser-Hutchens has been authorized by the R-7 School Board to begin preliminary planning for a new kitchen, lunchroom and auditorium center for the school at Carterville, Mo.

THE WENTZVILLE, Mo. R-IV board of education has voted to authorize preparation of preliminary plans for construction of a new senior high school complex. Preparing preliminary plans is Jack Sorkin of Lorenz & Sorkin, St. Louis, Mo.

CONSTRUCTION is expected to be completed in August, 1974, on the new vocational-technical school at Reeds Springs, Mo. The school will serve eight high schools in the Stone and Taney County area and also will be used for continuing education courses at night. Joe Amspacher of Springfield is the architect.
Joseph A. Cernik, a partner in the architectural firm of Wedemeyer, Cernik and Corrubia, Inc., has been elected president of the St. Louis Chapter of the American Institute of Architects. He succeeds D. Robert Downey of Murphy, Downey, Wofford and Richman.

CERNIK

A member of AIA since 1957, Cernik has held various chapter and state offices and chairmanships including secretary and vice-president of the St. Louis Chapter; a trustee of the Scholarship Fund of the professional organization; public relations, environmental and urban design committees; and a member of the legislative committee of the Missouri Council of Architects. Other officers and new directors include: Vice-President Bryce A. Hastings of Hastings and Chivetta, Inc.; Secretary David L. Hoffmann of Hoffmann/Saur and Associates, Inc.; Treasurer Ralph missouri council elects

Robert John Koppes of Duncan Architects, Inc., of Kansas City has been elected president of the Missouri Council of Architects for the coming year. He succeeds Gerhart Kramer of Kramer and Harms of St. Louis.

Other officers are David W. Pearce, the Pearce Corp., St. Louis, vice-president; Robert W. Marshall of Marshall-Waters Associates, Inc., Springfield, secretary; and I. Dale Allmon, Springfield, treasurer.

Directors named include: Angelo G. Corrubia of Wedemeyer, Cernik/Corrubia, St. Louis; Kenneth M. Schaefer, Sverdrup & Parcel, Inc., St. Louis; and William Linscott, Linscott Haylett and Associates of Kansas City.

st. louis honors craftsmen

Nine men of the St. Louis construction industry were named "craftsmen" by the St. Louis Chapter of the American Institute of Architects, at a recent dinner held in their honor. Selected from a list of 38 finalists nominated by members of the St. Louis Chapter, AIA, the Associated General Contractors and the Concrete Council, the "Craftsman"-titled men were: Raymond Christensen, iron worker; Ernie Foy, a hoisting engineer; Samuel V. Harvey, roofer; Joseph Hawkins, plasterer; Andy Hord, brick mason; Walter Lorenz, carpenter; Milton Newberry, tile setter; and two in a special category of "Coordinating Craftsman" for men who do not actually work with tools but promote "craftsmanship" on the construction site: Richard Dengler for new construction and Ray Langhammer for renovation.

Chairman of the Craftsman Awards Committee was Robert G. Galloway, Hellmuth, Obata and Kassabaum, Inc. Also serving as judges for these awards were Donald C. Donaldson of Pearce Corporation; Jerry Martin of Hoffmann/Saur and Associates; George Stephen Scott of Anselevicius/Rupe and Associates; and Edward W. Wilhelms of Kenneth E. Wischmeyer and Partners, all architects and members of the St. Louis Chapter, AIA.
The AIA Central States Region Committee on Architecture for Health, cooperating with the Midwest Health Congress, will sponsor an exhibition of Architecture for Health, June 10, 11 and 12, at the Municipal Auditorium, Kansas City, Mo.

Eligible projects are complete facilities or parts of facilities including hospitals, long-term care facilities, health centers, nursing homes and doctor's clinics, which were completed after January 1, 1970. Projects in the design or construction phase may also be exhibited, but the architectural contract for such work shall be dated not later than August 1, 1973.

No geographic restrictions are imposed by these rules. Displayed projects may be constructed or proposed for construction anywhere in the world. However, entries will be accepted only from architectural firms in the United States. All entries shall be submitted by registered architects.

Firms interested in exhibiting are encouraged to contact Charles L. Terry, AIA, Exhibits Chairman, 911 Main, Kansas City, Mo. 64105.

The historical Wainwright Building in downtown St. Louis, which includes among its tenants the St. Louis chapter of the American Institute of Architects, has received a new lease on life with the announcement that the National Trust for Historic Preservation has taken an option to purchase the building.

The 10-story building, designed by Louis Sullivan, Chicago architect, was completed in 1892. The real estate firm that owns the building said last summer that it was no longer profitable and that it might have to be torn down.

Approval has been granted by the Washington, Mo., school board on an estimated $500,000 two-story addition between the junior and senior high school.

A FACE LIFTING is scheduled for the old Liberty, Mo., High School now being used as a junior high school. A budget of $800,000 has been approved for the improvements that are hoped to be finished by January, 1975.

Ball and Engel, Architects and Planners, Springfield, Mo., is in charge of drawing up plans for the renovation of the Stone County jail facility in the courthouse at Galena, Mo.
new washington u. dean

Constantine E. Michaelides, acting dean of the Washington University School of Architecture, has been named dean of the school.

Dean Michaelides was named acting dean last July after George Anselevicius, former dean of the school, resigned to become chairman of the Architecture Department of the Harvard University Graduate School of Design.

Dean Michaelides, who joined the Washington University faculty in 1960, had been associate dean of the School of Architecture since 1969. He was assistant dean of the school from 1964 to 1967. From 1967 to 1969 he served as chairman of the school's curriculum committee and chairman of the graduate admissions and scholarship committee.

His professional experience includes work with Carl Koch & Associates, J. L. Sert of Cambridge, Mass., and Doxiadis Associates of Athens and Washington, D.C. He also was the architect associated with Smith & Entzeroth, Inc., for the new chemistry and engineering laboratories at Washington University.

He also taught in the School of Architecture in Ahmedabad, India, and the Graduate School of Ekistics in Athens, Greece.

Dean Michaelides received a diploma in architecture from the School of Architecture, National Technical University of Athens, Greece, in 1952 and obtained a master's degree in architecture in 1957 from the School of Design at Harvard University.

He is a member of the American Institute of Architects, Association of Collegiate Schools of Architecture, Society of Architectural Historians and the Technical Chamber of Greece.

THE COUNTY COURT of Chariton County has retained Frangkiser and Hutchens, Inc., of Grandview, Mo., as architects for a proposed new courthouse to replace the old structure that burned last August.

ROBERT COWLING of Kansas City has been rehired by the Brookfield, Mo., board of education to design a long range land use plan for the 52-acre school property adjoining Business Route 36 West and Pershing Road.

THEODOR M. Hoener, formerly of St. Louis and past president of the St. Louis chapter of A.I.A., has opened his own office in Cape Girardeau. After leaving St. Louis he was associated for a while with T. E. Phillips and Associates of Cape Girardeau.

HOW TO WRAP UP YOUR OUTDOOR JOB

Things looked bad for a J.E. Dunn Construction crew in Liberty, Missouri recently. With cold weather threatening, the window supplier notified Dunn that it would be several weeks before windows could be delivered for the Liberty District Hospital job. The crew chief immediately phoned Aylward Products for help.

"No problem at all," said Aylward. "You can use Kelly Klosures and bring the whole job indoors."

The suggestion was accepted. Kelly Klosures were installed. All indications are that the hospital will be completed on schedule. An extra benefit is that Dunn will have the Kelly Klosures around for many more jobs. They last six to ten years!

Standard 4' x 12' Kelly Klosure Panels consist of a frame of 1½ x 1½ x ½" angle with two cross members of ¼ x ¼ x ½" angle. Corrugated 7 oz. fiberglass covers this steel angle frame. Panels can be bolted together to form a temporary wall of almost any area. Light shines through. Cold stays out.

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This is a model of the proposed performing arts center at the University of Missouri at Kansas City. It is expected to be constructed with a $5 million grant from the R. Crosby Kemper family, a $6.4 million state appropriation, and private donations. The center will house the theater department and the Conservatory of Music on the U of MKC and also would be the home for the city’s major theater, dance and music groups. Architect for the building is Kivett & Myers of Kansas City.

**kivett and myers elects**

Kivett and Myers Architects and Planners of Kansas City has elected new officers and associates.

Henry O. Geipel and Albert F. Rhoads have been named vice-presidents to join the management group of Clarence Kivett, chairman of the board; Ralph E. Myers, president; and Aubrey R. Davis, vice-president.

Mr. Rhoads becomes director of design for the firm in the new management group. Mr. Geipel will continue his functions as director of construction management services for projects executed by the firm.

Harold Bowman and Hanan A. Kivett have been named associates of the firm. Both are veteran members of the Kansas City firm.

**new potosi school opens**

The new ultra modern, circular addition to the Potosi, Mo., High School recently was shown at a public open house.

The new $986,000 building, connected by covered walkway to the main building built in 1957, featured a central 2-story-high section housing an all-purpose room utilized as a combination cafeteria and gymnasium. Classrooms, food services, science laboratories, office space, dressing rooms, and other facilities are located on two floor-levels in a “ring” around the central “hub.” It is built of reinforced concrete with the exterior set off by buff brick and colored plastic panel windows.

Architects are Donnellan and Porterfield of Poplar Bluff.

WALTER GOEZ has joined the engineering division of John F. Steffen Associates, consulting engineers of Maryland Heights, Mo. Goez has 25 years of mechanical design and installation of heating, ventilation and air conditioning equipment.
firm change in columbia
Architects, Engineers, Planners of Central Missouri, Columbia, Mo., has merged with Ellerbe, a national architectural, engineering and planning firm and now operates as the Ellerbe regional office in Missouri.

Wynn Brady, formerly a partner in AEP, is office manager of the new operation. His associate, Carl Niewoehner, is regional marketing representative for Ellerbe.

new tri-county center
A new $1.8 million mental health facility, the Tri-County Community Mental Health Center in North Kansas City, Mo., designed to serve Clay, Platte and Ray counties has been dedicated.

The new center is a single story brick structure designed in four rectangular sections with a total of 24,000 square feet and an unfinished basement of 18,000 square feet. It provides 24 private in-patient beds, 20 for adults and four for children. Each patient room has its own private bath.

Architect was Robert W. Jackson and Associates.

joining forces
Paul J. Marshall has joined with the architectural and planning firm of Peckham-Guyton Inc., St. Louis, Mo., to form PGA Engineers Inc., which will offer combined architectural-engineering services to national clients.

Marshall has had 17 years of experience in the field of consulting engineering, most recently as project engineer on the Pierre Laclede Center for William Tao and Associates.

library for washington
Hammond, Charle, Burns and LePere of St. Louis has been recommended by the library board of Washington, Mo., to prepare plans for a new library in that city.

The firm also is to do other work for the city, including a study of the present city hall building.

SPEED DEMON
Johnny Kane has stepped up the pace in our photographic department, and this is the reason. A brand new Kodak Supermatic-Star mechanized processor. It handles positives on conventional film or wash-off film, film negatives, paper negatives and paper positives. Reproduction is absolutely tip-top and uniformity is unequalled. Phone us with your next job and check us for quality and speed. We think you'll give us top marks in both!

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Crown Center Shops Client: Crown Center
new tuscumbia jail

Construction is expected to begin this winter on a new jail for Tuscumbia, Mo., which has been without such facilities since September, 1971, when the town's old structure was closed by circuit court order. It will be located west across the street from the courthouse.

Plans by Architect Harry G. Rowe, Springfield, call for a structure of concrete and concrete block construction 21 feet 4 inches by 31 feet 4 inches with approximately 600 square feet of space on each of three floors.

hospital improvements

Pike County Memorial Hospital trustees have accepted a $160,000 bid by Hoel-Steffen Construction Co. of St. Louis for completion of a third-story wing of the new hospital in Louisiana, Mo.

The new facilities will include a five-bed intensive care unit, a physical therapy unit, electrocardiogram and inhalation therapy units and an office for the director of nurses.

Architectural firm for the hospital improvements is Harold A. Casey and Associates of Springfield, Mo.

new methodist church

Paul F. Rich of Springfield, Mo. has been selected as architect to design a new sanctuary for the First United Methodist Church of Carthage, Mo.

The proposed building will replace the old sanctuary destroyed by fire May 8.

In the past 17 years, Mr. Rich's architectural firm has designed 40 churches throughout Missouri.
Today there is an adequate supply of natural gas for existing residential and small commercial customers... but there are steps you should take to conserve natural gas so that these and other customers may be served in the future.

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Our principal supplier of natural gas, Cities Service Gas Company, has announced an agreement with Northern Natural Gas Company of Omaha to examine the feasibility of constructing and operating four coal gasification plants in the Powder River Basin area of southeastern Montana and northeastern Wyoming. Each plant would be capable of producing 250-million cubic feet of gas daily. A proposed pipeline, some 700 miles long, would transport the supplemental gas supply.

The Gas Service Company is participating with the Department of the Interior and the American Gas Association in research and development of pipeline-quality synthetic gas from coal. Coal gasification could boost gas supplies far into the future.

Other projects are now under way to produce synthetic gas from petroleum products.

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With winter just around the corner, there are certain steps you can take right now to help conserve natural gas — and save money all winter long.

Before it gets too cold — caulk around your windows and doors. Replace worn weather stripping that allows valuable heat to escape and cold air to enter. Check the insulation in your attic right away, too. Make sure it hasn’t matted down and become inefficient. You could see your hardware or insulation dealer this weekend.

Clean or replace your furnace filter. Have your gas furnace man inspect and service your heating equipment before the rush.

These are a few steps you can take right now which will reduce the waste of natural gas while you are still maintaining normal living patterns. In the next few weeks, we will be giving you other gas saving tips. You’ll make yourself more comfortable while you save our nation's valuable energy supply... and save dollars, too.
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