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Cover: Detail, IBM Building, Cedar Rapids, Iowa, designed by Leo C. Peiffer, Architect, and Associates. Story in remodeling section beginning page 17.

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The Role of Architects in Shaping Cities

By Charles A. Blessing, F.A.I.A.

Charles Blessing, F.A.I.A., is Director of City Planning, Detroit. His exceptional accomplishments in that city are national knowledge and require no documentation here.

Mr. Blessing presented his ideas to the students and faculty of the Department of Architecture, Iowa State University on April 27, 1966. The occasion was the annual Awards Banquet, at which many members of the Iowa Chapter, A.I.A. were present.

His message need not be entirely student-oriented: the practicing architect may also benefit from a careful consideration of its implications.

In the all too short visit with you here at the Architectural School of Iowa State University, I would like to share with you some of my enthusiasms, explain what I believe to be most important in your role as the future architects of this state and nation, and to leave with you a challenge which will not go away, leave with you thoughts which will stay in your mind as each of you in his particular sensing of his role in the world ahead moves forward to make his very personalized commitment to society.

Many years ago I came upon a very small book by Henry Drummond. Its title — "The Greatest Thing in the World." With but a moment's pause I believe most of you would correctly identify what that greatest thing is — "Love." Now I say to you as architects (and I have always felt that to be a beautiful, expressive, evocative word — *architects*) that the greatest thing in architecture is the love and understanding of people, of cities and of nature.

Sunday I enjoyed a most wonderful visit with Lou Kahn, who is more and more being recognized as one of the most thoughtful and imaginative and evocative architects in the world today. He spoke of many things: of his belief that the form of the city is the most important challenge today; of his feeling that architecture is not a thing but a spirit; that one does not create architecture but rather creates works which he dedicates to the spirit of architecture; that nature forms things as the result of the unending play of forces of material; but finally that only man wills things — only man is purposeful. Kahn said that in a deep way he believes that Vander Rohes' trilogy material - function - creativity - is correct in its sequence, in a primitive kind of way. Kahn would like to reverse the order (creativity-function-material) but agrees that a point of beginning for all architects should be the recognition that form is more significant as a transitive verb rather than as a noun - that the forces of nature form or create the shapes and spaces of nature. Ben Shahn, the painter, has said that Form is the Shape of Content.

This brings me to my basic challenge to you as the moulders and shapers of the future. Several years ago and just before his tragically premature death, I had a long talk with Eero Saarinen until three o'clock one morning. We talked much of architecture and of cities. Saarinen said that he had come more and more to recognize that the real problem, the great problem of this age, the most important thing in all of architecture is to move up to the challenge of creating finer cities — more important than the single building, the campus, the large institutional group, the commercial or industrial complex. He looked forward to a future as a designer and planner of cities.

Lou Kahn is today most excited by this same challenge and will go to India in May to begin work in the design of a new city of 500,000 people. Kahn says more correctly that one does not design a city, he first studies the needs and functions required by the particular city then *composes* the parts and finally *designs* the buildings. He speaks of the architecture of water, the architecture of movement in which the highway must be thought of as a building of which the terminal point, a parking facility, is as much a part of the highway as the lanes for pavement.

In no small part the responsibility for initiating the steps toward the achievement of fine cities must rest directly on the shoulders of students such as you in the many schools of architecture and of the allied design professions — planning, landscape architecture and engineering. We must become impatient with prerogatives attached to words, names and categories. In the complexity of the urban world we can ill afford to dilute our energies in useless parochial quarrels as to who is the master and who is the helper. Perhaps we should all be the keepers of society. When I asked a taxi-cab driver in New York, Sunday, who is the greatest architect in New York today, he answered:

"I don't know his name, but he is the man who designed the Verrazanno Bridge over New York Harbor from Staten Island to Brooklyn." The designers were Ammann and Whitney, bridge engineers.

concrete progress...

cement manufacturers work so many ways to make it happen

MATCHING CONCRETE'S TALENTS TO THE ARCHITECT'S CREATIVENESS

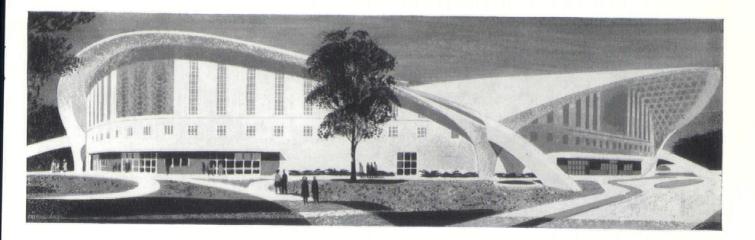
Today's unique concrete shell roofs evidence dramatically how concrete is capturing the imagination of architects-and for that matter, of professionals in every field of construction. D Yet, the growing appeal of concrete is no mere happenstance. It has been developed by broadening the versatility of concrete, by enabling builders to exploit its limitless potential-by literally "making progress happen." D Major responsibility for this development was taken on years ago in the U.S. and Canada by the manufacturers of portland cement. While competing for sales, they cooperate for progress. Through their Portland Cement Association, they sponsor a development program beyond the resources of any of them individually.
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depend on the continuing flow of engineering and technical literature provided—as well as the services of a specialist staff, including 375 field engineers working out of 38 district offices. □ These services are among the many provided by cement manufacturers, without charge, to users of concrete. They benefit everyone in some way every day at work, at home, on the highway.

PORTLAND CEMENT ASSOCIATION 408 Hubbell Bldg., Des Moines, Iowa 50309 An organization to improve and extend the uses of portland cement and concrete



TESTING A NEW TWIST IN CONCRETE. Engineers at PCA Laboratories subject a concrete shell to 10½ tons of load. Findings help architects and construction engineers to broaden their uses of concrete in fresh, bold ways.



The important thing is that the architect has a clear image of what he is — what his unique contribution to the world of today *can* be, because there is a *uniqueness* in the profession of architecture — a richness which transcends in the world of creativity even literature and music, painting and sculpture — in the mind of the architect, that is. Who would say which man was the greater — Sir Christopher Wren, Leonardo da Vinci, Shakespeare or Beethoven? Each in his chosen way has achieved greatness — none would deny the great achievements of the others. It is only that to a real architect, the spirit of architecture, the love of architecture is central to his being — it motivates him, drives him on — inspires him — gives thrilling purpose to his life.

As stated by Donald W. MacKinnon:

"The creative person, the architect effects a reconciliation between a rational concern with truth and an emotional concern with form and beauty. For the truly creative person, the solution of a problem is not sufficent, there is the further demand that it be elegant. The aesthetic viewpoint permeates all of a creative person's work. Another pervasive trait of the creative person is his preference for complexity, his delight in the challenge and unfinished which evoke in him an urge, indeed a need to discover unifying principles for ordering and integrating multiplicity."

(— "What Makes A Person Creative," The Saturday Review, Feb. 1962)

Here indeed we have the dominant characteristic for the designer of cities — a highly enlightened, perceptive creativity brought to bear on the challenging, complex, intricate and unresolved problems of the true nature of the city expressed in form, shape, space and scale. Here we have the reason why the greatest of the architects of all ages felt the challenge of designing cities. Hippodamus of Miletus, Leonardo of Florence and Milan, Sir Christopher Wren with his plan for London after the Great Fire of 1666, and more lately, Eliel and Eero Saarinen, and Lou Kahn with his greatest work ahead of him.

The greatest challenge to architecture today is the creative design of the city, to which compelling commitment the architect must bring an abiding love of the city, an understanding of the evolution and growth of cities, a feeling for history, and an awareness of the *sense of place* which comes about only when man's will is applied to a location or site in nature. The Grand Canyon, vast as it is, is the resultant of eonslong unpurposeful forces. The Acropolis in Athens, Venice with its great St. Mark's Piazza and Salzburg with its elegant adaption to a setting of great natural beauty are all the results of man's will, man's urge to create, to shape, to make beautiful his evironment.

Perhaps both are of equal value. To create a beautiful city, man must first be aware of the true art hidden in nature, revealing the world of exquisite natural forms which surround us everywhere, but which to many of our unobservant eyes frequently remain hidden. We must sense the inexhaustible and astonishing richness of pattern and design which contribute to the wonderful diversity of nature.

I believe that the most important field of inquiry to the future of architecture is the creative design of the city itself. To design cities we must first learn to visualize — to *see* cities as they are in nature and

as they could be in the future. The vision of the creative architect — the extent of which he has perceived the shape of the world today — is the crucial factor in the building of better cities. In architecture and city building we can build only up to the limits of our vision.

The architect must build his potential for imaginative creativity by perceiving acutely the world of nature and city around him. The architect and designer of cities must learn to see — to perceive — to imagine on a scale never before faced by designers. Some help can be offered by the richness of his vision of form in nature and of the stored images of the great architectural and urban compositions from the past six thousand years. The architect must resolve the dilemma of reconciling in his design all the implications of a vast technological revolution in building, in movement, and in the overwhelming pace of change in the rate of growth and scale in cities.

The *quality* of environment of the city of the future will rest upon the creative imagination and intellectual vigor of the skilled and sensitive creative architect of cities.

The education of architects for the design of cities must be perfected rapidly if we are to reverse the progressive formlessness and ugliness which is undeniably threatening to engulf the entire urbanized world. The design of cities can be advanced only when countless architects throughout the nation and the world make it their great concern. The tremendous increase in awareness of the importance of the design of cities must be still further encouraged. Both architectural educators and countless practicing architects realize that the design of cities is of overwhelming importance today. How to educate the architect for the design of cities is basic to the future of architecture itself.

A philosophy of the design of cities is a great and continuing need.

The real question before you as students of architecture and as the future architects of this state and nation is — as you look around you today and see the mistakes of the generations just before you, in unlovely cities, and sadly much-too-much incompetently designed architecture — what of the future? What are the goals of you who are the architects of tomorrow? What are your aspirations in terms of creating a physical environment, humane in quality and beautiful in aspect as well as efficient in function and economically sound in operation?

What price in time, effort and resources are you as students prepared to pay to equip yourselves by training, experience and deep thought as the architects of tomorrow, capable of creating the finest environment in the history of the world? — an environment which in time may be the common heritage of the whole world, with your ideas and thoughtful innovations in design equally valuable in Calcutta, Cairo, Caracus or Katmandu?

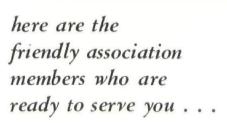
In no small part the responsibility for initiating the steps toward the achievement of finer cities must rest directly on the shoulders of you students in this room and of others like you. You in choosing architecture have made a deep commitment to society. You must be held accountable for the failure of your environment. Your voices must be heard so that all the others required in the process of building cities will heed your call for beauty combined with economy, humanity combined with efficiency, richness of quality combined with practicability.

8

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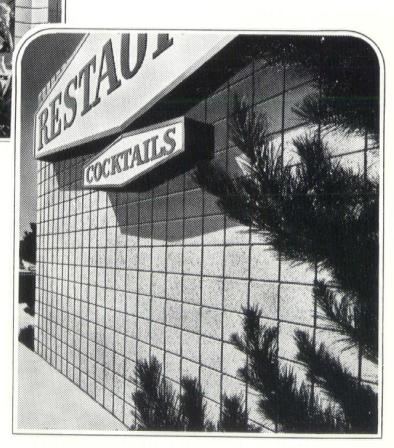
Walls are often used to create an image or to establish a purpose for the building. That's why astute architects try to relate wall and building much in the same manner a package designer wraps a product.

The versatility of concrete block gives modern architects all the help they need. They can use them as a single pattern, mix them for a combination pattern, or offset some units from others in the wall for added flair and dimension.



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Iowa Concrete Masonry Association an organization to promote the proper use of concrete masonry

Ashley Examines "Or Equal" Clause

James M. Ashley, Vice President in charge of Public Relations for the Libbey-Owens-Ford Glass Company, was in Des Moines June 1st to speak at a luncheon for architects. Hosts for the meeting were the members of the Iowa Chapter, Producers' Council, Inc.

Mr. Ashley stated some unequivocal views on the "or equal" specification clause and its ramifications for the architect, manufacturer, contractor and client. With his permission, we print them for those who could not be in attendance.

It has been 29 years since my last visit to Des Moines. In those days, Libbey - Owens - Ford assigned a salesman headquartering in Chicago to travel throughout the State of Iowa two weeks out of every month. That seems wholly inadequate attention to give to this important market, but you must remember that we were just beginning in those days to struggle out of the depression. The risk, even of my modest salary and expenses, was hard to justify on the balance sheet.

A lot has happened to Des Moines since those days. To anyone living here, the change has probably been gradual enough never to be starling. But if all the new building and all the remodeling that has been done since 1937 were to be erased at this moment, your reaction would parallel my own. You simply wouldn't believe it. It gives me real pleasure to meet the men responsible for giving this fine city its new and purposeful look, and I congratulate you.

To be completely candid, I was a little hesitant about coming here today. The fact is that the last time I called at an architect's office in the interest of developing specifications was in 1938. Since then other assignments have claimed my attention: The conversion of our Company from peacetime products to war production, the direction of our advertising and sales promotion programs, representing Libbey-Owens-Ford in the legistlative matters in Washington that impinge increasingly on the conduct of all business. For me to speak on the subject of construction specifications seemed a little like asking a survivor of the Grand Army of the Republic to address the American Ordnance Association on the subject of modern infantry weapons.

So it is with unfeigned humility that I face this microphone and the knowledgeable audience behind it. Two things, however, offer me some solace:

First, no one seriously interested in construction can be indifferent to the alchemy which transforms the gossamer stuff of which dreams are made into realities of steel and stone and glass. All of us understand that you are the alchemist; that the degree of your competence, and the discipline with which your orders are executed, is the true measure of ultimate result. Thus while I had been denied the stimulus of watching you dig your way out of your daily quandary, I have by no means lost touch with the truly heroic efforts you architects have been making on behalf of manufacturers of building materials, the construction crafts, and the trusting, starry-eyed owners, God bless them.

Second, it occurs to me that the principles which set your objectives and dictate your strategy are the same whether you are armed with a muzzle-loading, smooth bore musket, or an anti-tank bazooka.

Surely it must be the objective of every architect who subscribes to the ethics of his profession to satisfy the building requirements of his clients as fully and as completely as the budget permits, and to protect his client against those abuses of trust with which all of us are only too familiar. This is by no means a responsibility that is easy of accomplishment. I can think, as I am sure you can, of examples where specifications inadequately defined "quality of workmanship" and where, because of this inadequate definition, there was no recourse for shoddy performance.

To say and illustrate precisely what is wanted by the architectural office so that there is no possibility of misunderstanding, so that no part may be contraverted without legal recourse, requires writing of the highest order. Perhaps also, a dirty and conniving mind would help — one able to imagine and thus forestall every trick in the building trades lexicon.

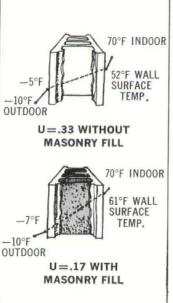
In my few moments with you today, I should like to discuss a principle of specifications which has overriding importance, not only to the producers of building materials for whom I speak, but to you architects and your clients as well. I refer to the degree of firmness with which specifications are written.

I consider the words "or equal" to be the most pusillanimous words ever written. Since they appear so often, I must assume that they have been used by many in this audience. Perhaps, therefore, it would be politic to use a gentler adjective than "pusillanimous." The truth is, I have felt strongly about this for too many years to pussyfoot.

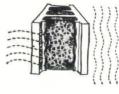
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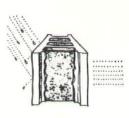


For Insulation Value Zonolite Masonry Fill is an excellent insulation. The illustration above shows exterior and interior temperature contrasts on an 8" lightweight concrete block filled with the material. Note the U value of .17. Without the insulation, the U value of this same block is .33.



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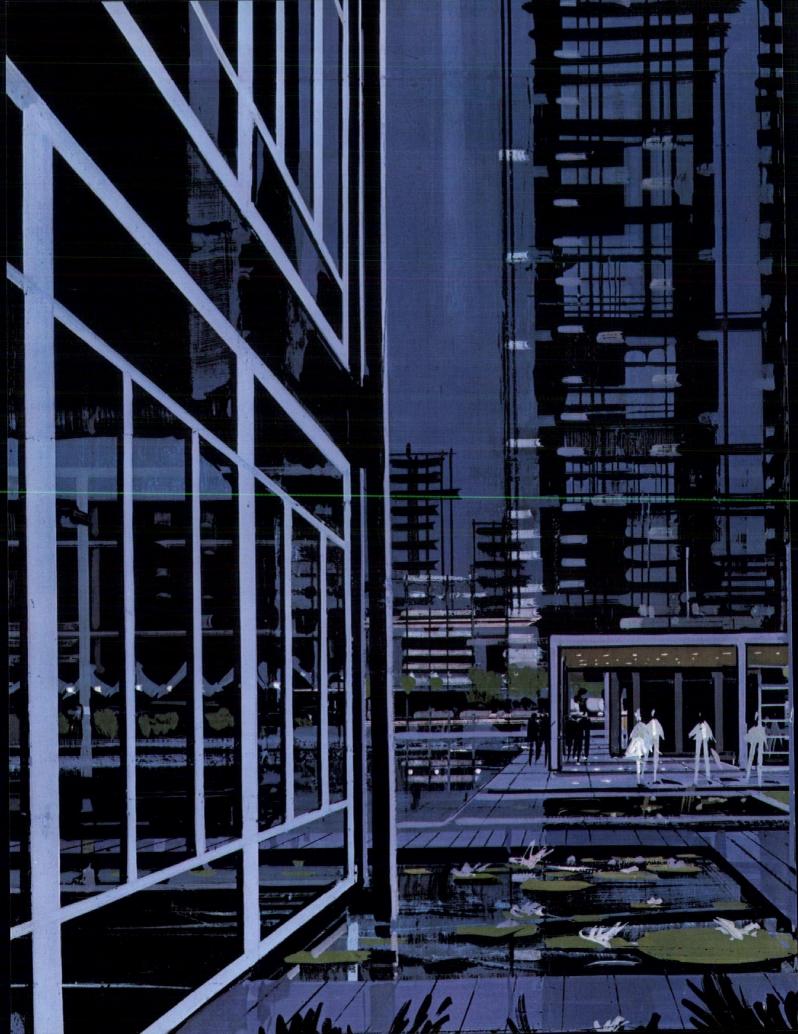
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Use and Misuse of Fire Doors

By Richard E. Stevens

The following article is reprinted from FIRE JOURNAL with the permission of the National Fire Protection Association, 60 Batterymarch Street, Boston, Massachussets. The Author, Mr. Stevens, is Assistant Technical Secretary for NFPA.

Although fire doors have been used since before the turn of the century, their use still is not adequately understood.

One common misconception is that the fire protection rating of a fire door placed in a wall can be equated to the fire resistance of the wall. The reason these cannot be equated is evident from a review of the Conditions of Acceptance for walls and partitions in NFPA No. 251, Standard Methods of Fire Tests of Building Construction and Materials, and the Conditions of Acceptance for fire doors in NFPA No. 252, Standard Methods of Fire Tests of Door Assemblies. Each of these Standards has different performance criteria, for walls and doors perform different functions within a building; but the major differences lie in the specifications for heat transmission and hose stream application, even though the furnace temperatures are controlled in accordance with the same Standard Time Temperature Curve.

For doors there is no limitation on transmission of heat, as there is for walls. While some fire doors are listed for maximum temperature rise of 250° F on the unexposed side during the first 30 minutes and some for 650° F during the first 30 minutes, the temperature rise on the unexposed side of other fire doors can exceed 650° F. A door is assumed to have a clear space on both sides of the opening. Should combustible material be piled in front of a door, it could ignite.

The hose stream test is not required in the case of wall constructions having a fire resistance rating of less than one hour. On the other hand, the fire door standard specifies that the hose stream that shall immediately follow the fire endurance test for all assemblies whether for less or more than one hour.

SOME INTERESTING HISTORY

At this point a question arises: If the ratings of walls and doors cannot be equated, how can I select the correct door for a particular opening? To answer this, it is helpful to cite some history that may not be familiar to many people. Note that comments pertain primarily to the listing and labeling practices of Underwriters' Laboratories, Inc.

When Underwriters' Laboratories first began to label fire doors, the criteria for labeling were based on door assemblies that in actual fire exposure protected the openings on which they were installed. From this beginning, UL developed a method for testing fire door assemblies. The fire endurance test lasted one hour, with the furnace temperatures averaging 2,000' F at the end of the hour. After the fire endurance test, a hose stream was applied to the exposed face. The labels indicated where the door could be used. No rating in hours was given. At that time, codes and standards referred to fire doors only for use in certain types of openings. It was some years later before the fire endurance tests were conducted in accordance with the exposures set forth in the Standard Time Temperature Curve (the furnace temperatures to average 1,700° F after one hour, $1,850^\circ$ F after 2 hours, and $1,925^\circ$ F after 3 hours.)

Later, some building codes were revised to specify hourly ratings and, in some cases, heat transmission limits for specific locations. This led to testing doors for 3, 1½, 1, and ¾ hours. But UL continued to apply labels designating a door by location, such as Fire Door for Opening in Fire Wall.

To assist code enforcement authorities, manufacturers, and others operating under these codes, Underwriters' Laboratories in 1955 revised the labels to show hourly ratings and the class of opening for which the door was labeled. Some doors for Class A, B, and D openings were also labeled with a maximum temperature rise during the first 30 minutes, This permitted authorities to select doors for a given location by whatever method prescribed in their respective codes; namely, on a time or heat transmission basis, or both, as well as for a given location, as with the original practice.

The use of hourly ratings undoubtedly started people equating the fire resistance ratings of walls to the fire protection rating of doors. The error of this thinking was that even though the time-temperature exposure was the same, the test method and the conditions of acceptance were different.

SELECT DOORS ON USE, NOT RATING

The suitability of a fire door should be judged on the class of opening in which it is to be installed, not on the fire resistance rating of the wall in which it is to be installed. Once the class of opening has been determined, there is no choice of door hourly ratings, except in the case of the Class B openings. (In the transition from designating doors by intended location to designation by intended location plus fire exposure, Class B doors were given a 1-hour and 1½-hour fire exposure.)

If the opening is in a wall dividing a building into separate fire areas, the door should be suitable for installation in a Class A opening (3-hour fire protection rating). The same door can be used whatever the fire resistance rating of the wall. If a wall encloses a vertical communication, the door should be suitable for a Class B opening.

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Some Transformations

A series of remodeling projects by Iowa Architects

Project: IBM BUILDING

An Office Building

CEDAR RAPIDS, IOWA

Architect:

Location:

LEO C. PEIFFER AND ASSOCIATES, CEDAR RAPIDS

The original IBM Building shown was completed in 1958. The one story partial-basement structure was soon outgrown.

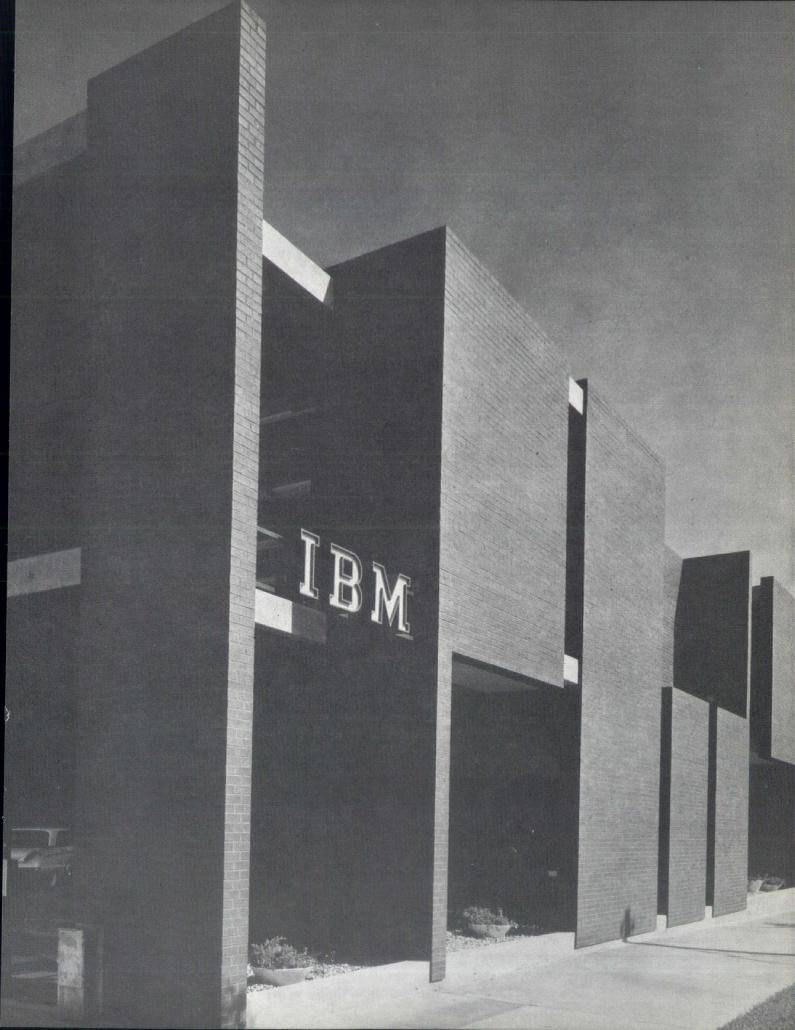
The structure was found to be sufficient to carry a second floor and IBM desired to remain in this location.

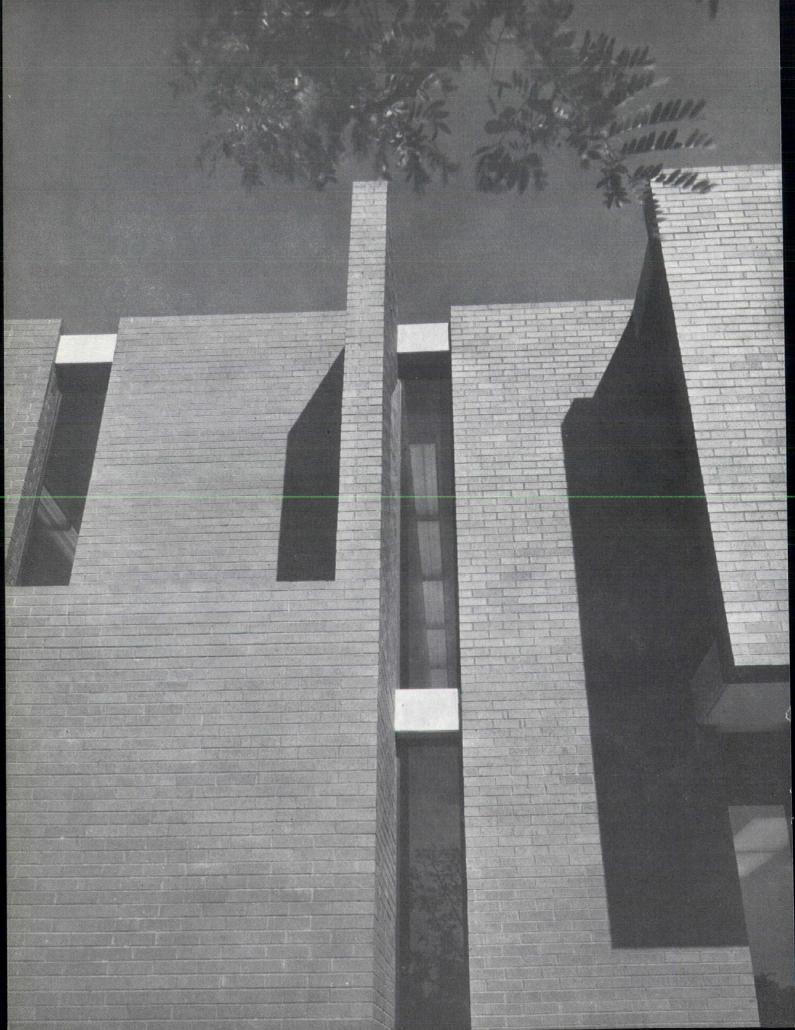
The entry adjacent to the parking lot and a two story stair well were added to the left as seen in the photo. The interspaced brick panels and grey glass cover the new second floor and existing first floor structure.

Original Building



Photographer, Remodeled Building: L. W. Ward..





The over-all facade shows the interplay of warm brown brick panels, voids, glass areas, and architectural concrete. The added second floor doubled the size of the building and provided the much needed additional office space, lecture and demonstration classrooms. The brown face brick is laid in matching brown mortar to give a homogenous panel effect. The only other 'color' used outside was the traditional blue outline of the sign letters reading IBM. At night bright spots of pure accent colors are plainly visible through the glass areas, giving the over-all building an entirely different effect.

Narrow slits of grey glass set in black anodized aluminum window frames control the light and shield the occupants in the work areas of the building. The floor and roof levels are indicated by the light grey exposed architectural concrete.

Washed river gravel and white pottery fill the planting areas at the first floor level.

The remodeling was completed while being fully occupied by IBM.

Facade



A Telephone Exchange

Project:

NORTHWESTERN BELL TELEPHONE EXCHANGE

Location:

DAVENPORT, IOWA

Architect:

LOUIS C. KINGSCOTT & ASSOCIATES, INC., DAVENPORT



Original Building

Photographer: William J. Bieg.

The design considerations for remodeling this building evolved from the nature of the equipment it contains, which needed not only shelter, but also special protection.

The original building had an outside wall of almost 80% glass. One of the first of the owner's requirements was to eliminate this glass, as the old windows were of decaying wood and could have let in damaging light and water.

The equipment to be housed in the building was of an extremely sensitive nature in the case of a national emergency and therefore had to be protected from external sabotage. This suggested the use of 9inch thick concrete panels to cover the exterior walls. The building also needed to be air conditioned, and the addition of this much concrete lowered the heat loss and heat gain characteristics of the wall.

The big overhanging cornice (threatening to fall off at any time) was removed, and the remodeling, to be sympathetic with the business office addition down the hill, repeated two of the materials used in this earlier addition: red brick and cold spring granite.

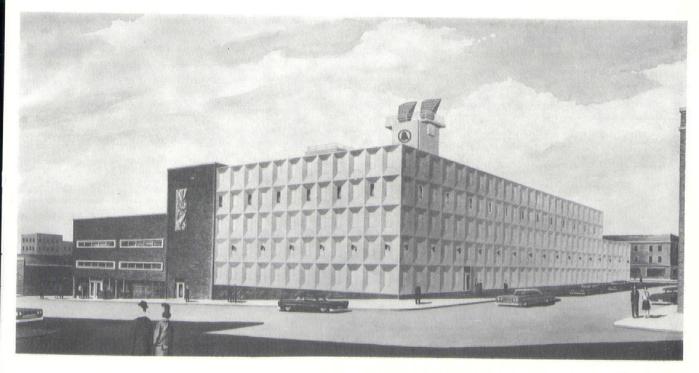
The structure was to have no horizontal ledges or slopes shallow enough for bird roosts or bird nests; this called for the almost flat wall treatment shown.

The transmission towers on top of the building were also part of the commission, along with the Bell symbols and art work. The art work shown on the rendering is currently under construction. It is approximately 25 feet high and 6 feet wide, weighs 8 tons, and will be made of exposed aggregate concrete. Jerry Shirley, Waterloo Artist, has been commissioned to do this portion of the project. It will probably be the largest piece of outdoor sculpture in the Midwest (at least the heaviest).

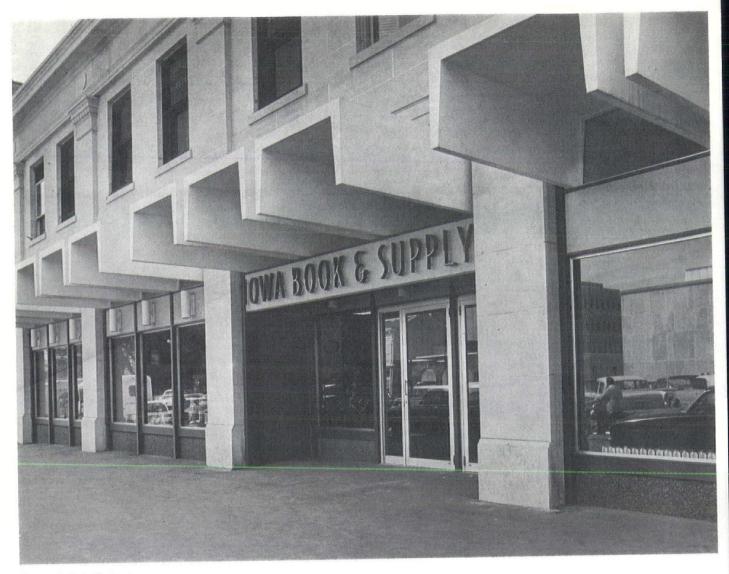
The building was designed to be lighted at night in an attempt to brighten up an otherwise dark intersection and to upgrade this section of the city.



Remodeled Building



Rendering



Remodeled Exterior

A Book Store

This project involved the expansion of book store facilities from an area of 6500 sq. ft. to 11,500 sq. ft. by absorbing space previously occupied by four other businesses in the same building.

The store originally had a 20 foot frontage. Now it has a total of 93 feet, with 54 feet on Capital Street and 39 feet on Iowa Avenue.

The existing building, built in 1917, had a concrete frame faced with limestone. The facade was uncluttered, and was broken into fairly uniform bays. This allowed each bay to be treated individually but similarly, continuing the repetitive feeling of the structure. The canopy units were precast of white concrete to harmonize in color and shape with the existing building.

The incinerator was converted into a fireplace.

Project:

IOWA BOOK AND SUPPLY COMPANY

Location:

IOWA CITY, IOWA

Architect:

WEHNER AND HENRY, IOWA CITY



Remodeled Interior

Fireplace



A Building of Historic Significance

Project:

OLD QUAKER MEETING HOUSE

Location:

WEST BRANCH, IOWA

Architect:

WETHERELL-HARRISON-WAGNER, DES MOINES

The old Quaker Meeting House was originally built in 1855 about two blocks north of its present location. The building is of historic interest because of its association with the Hoover Family. Herbert Hoover attended as a child and his mother, Hulda, shared spiritual worship here by speaking often before the congregation.

The building in its history has been moved twice and altered many times. In the early 1880's the Quaker congregation split. The conservatives built a new meeting house to carry on with the original practices of an unprogramed, non-pastoral meeting. This agitation was going on at the time that Mrs. Hulda Hoover was living. She once remarked that it would not surprise her if the church would one day become a theatre.

The old Quaker Meeting House went through sub-

stantial alterations in the 1880's. This was done to completely change the original appearance after the separation. The side entrances were closed. The side walls were raised 3 feet and a spire and tower were added to the end. All of the special floor framing which was necessary for the divided congregation and the facing benches were leveled, one way or another. In 1915 the building was sold and moved across the street to make way for a new Friends Church. It was at this time that the church was altered again to become the West Branch Theatre and Mrs. Hoover's prediction came true. With the advent of TV the theatre folded. The old Meeting House was cut up and altered to become a garage work shop. At this time some of the structural members were damaged from overloading.



Building Before Restoration



Restored Building

In 1964 West Branch citizens raised the necessary funds to purchase the building which they gave to the Herbert Hoover Birthplace Foundation. The Foundation then moved the building again and completed restoration. The interior was refinished. Fortunately, the old Meeting House at Scattergood School a few miles east was in the process of being remodeled and it was possible to acquire from them their dividing partition and old pews. Their house was not quite as old but the difference in detail of ten years was not noticeable.

The restored Meeting House is part of the complex forming the Herbert Hoover Birthplace and Park at West Branch, Iowa.

A Medical Building

Project:

MEDICAL ASSOCIATES OFFICES

Location:

CEDAR FALLS, IOWA

Architect:

ROBERT DEVOE, CEDAR FALLS

Fire in the 100 year old First Congregational Church left only its 1952 Educational Building intact. In this remodeling, the church shell was razed, the old basement was filled, and the remaining building was completely remodeled and expanded to provide facilities for five doctors, rental space for one dentist, and room for additional growth within the structure. The unit cost for the remodeled space was as estimated, 75% of new space (including acquisition and remodeling costs.)



Old Church After Fire



New Medical Building

The existing high ceilings and resulting tall, narrow appearance allowed ample space above dropped ceilings for mechanical facilities and prompted the lowered overhang and Mansard roof design.

A Church

Project:

FIRST FRESBYTERIAN CHURCH

Location:

CEDAR RAPIDS, IOWA

Architect:

BROWN, HEALEY & BOCK, CEDAR RAPIDS

It was the desire of the Church to preserve the sanctuary structure of a one hundred year old church building on the edge of the Cedar Rapids central business district. The congregation felt that the church building should be retained due to its historical significance in the development of the city. The church was the only large church left near the center of the city and therefore played an important part in the community providing for inter-faith holy week services. a convenient place of worship for transients and people who work in the city, and other civic-religious activities.

The structure was found to be sound except for the wooden main floor, which had deteriorated to the point of being unsafe for large crowds.

The old native limestone walls were pointed and cleaned and the exterior trim painted. The wood floors were removed and a new fireproof floor and balcony were installed. The main floor was built lower to eliminate some of the steps.

Most of the "gingerbread" wood decoration was removed and the walls, ceiling and dark wood that remained were painted in warm whites and gold. The chandeliers that interfered with vision from the balcony were replaced with recessed incandescent fixtures on dimmers. All the stained glass windows were cleaned and sealed with an outer glass to protect windows and to seal out traffic noise and drafts.

The entire structure was air conditioned, including the new rooms that were created beneath the sanctuary.

New warm walnut paneling, organ screens, organ console and pews were added along with new walnut chancel furniture which was especially designed by the architect for this church. Walnut sculpture on the pulpit, lectern, and communion table were commissioned to be done by Edmond Whiting, who worked under the direction of the architect.

The communion table is topped with travertine marble, which was also used on the walls of the foyer. The Narthex is completely paneled in Wanut and has a natural slate floor.

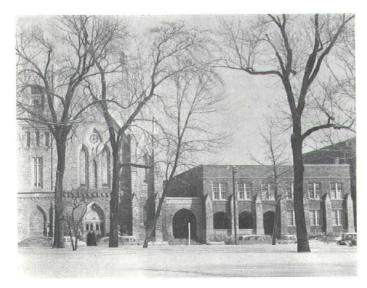
The aisles and chancel in the Sanctuary are covered with a gold carpet which matches the nylon upholstery on the pews, Elders' bench and clergy seating in the chancel.

Silver candle holders and Chalice were executed by a silversmith in Switzerland following rough sketches made by the architect. The Chalice is of the same size and proportions as the Chalice of Antioch, but of a more contemporary design.

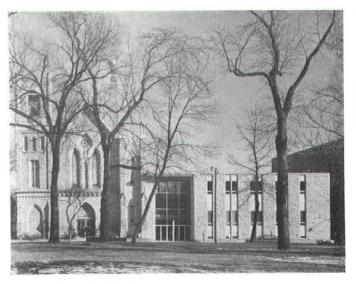
Remodeling cost was approximately \$200,000 and the building was completed in 1962.

Photographer, Original Building: John W. Barry

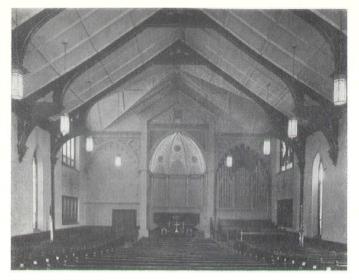
Photographer, Remodeled Building: Joel Strasser



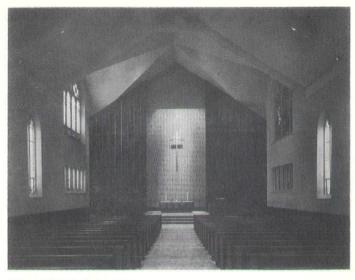
Original Exterior



Remodeled Exterior

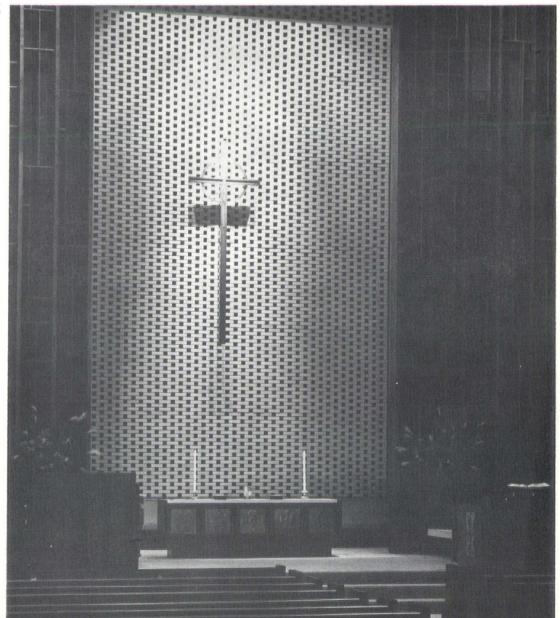


Original Interior



Remodeled Interior

Chancel



Project:

IOWA-ILLINOIS GAS AND ELECTRIC CO.

STEWART-ROBISON-LAFFAN, DAVENPORT

Location:

DAVENPORT, IOWA

Architect:

A Public Utilities Building



The project consisted of refacing the entire building and completely remodeling of the first floor area for sales and customer service.

An air door was installed at the main public entrance to the sales floor, and a fourth outside drive-up window was installed for the convenience of customers in paying bills. Incorporated in the drive-up facility is a small pool, fountain and planting area.

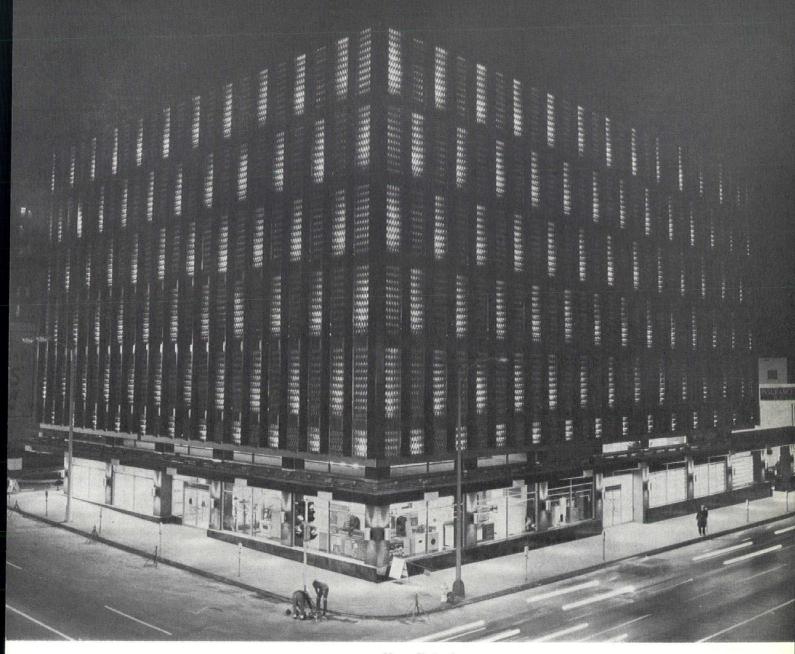
For facing material, aluminum panels made up of 6 in. diameter extruded aluminum tubes cut at an angle of 60 degrees were used. The panels and spandrel plates are gold anodized. The vertical members are formed of bent aluminum plate and are charcoal anodized.

The aluminum panels are set about 3 ft. 6 in. in front of the walls of the existing building with a walkway of steel grating at each floor level. Certain of the panels are hinged to permit access to the building by the fire department.

Original Building

New Customer Service Area





New Exterior

The new facing is supported by steel brackets welded to existing columns. The upper walls of the old building were not disturbed except to remove the copper cornice and a projecting stone course. The lower floor wall was removed from floor to ceiling. This created a minimum of inconvenience to the owner and permitted him full use of the building except for the ground floor, during the entire construction period.

The space between the new facing and the old wall is lighted by two fixtures for each panel. The exterior face of the panels is lighted by spots and floods on top of the canopy. The lighting is programed so that combinations of lights form patterns that change every 5 seconds.

All columns, inside and out, are covered with black ceramic tile, part glazed and part natural. The base inside and out is of dark green marble.

The owner felt that the building created its own identification and chose not to use any signs except for some very small aluminum letters immediately over the entrance doors.

A Large Hotel

Project:

TALLCORN HOTEL

Location: MARSHALLTOWN, IOWA

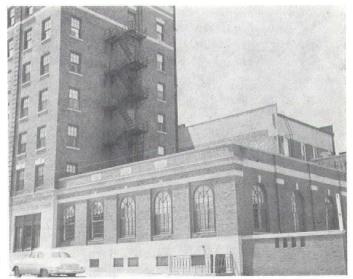
Architect:

CRITES AND McCONNELL, CEDAR RAPIDS

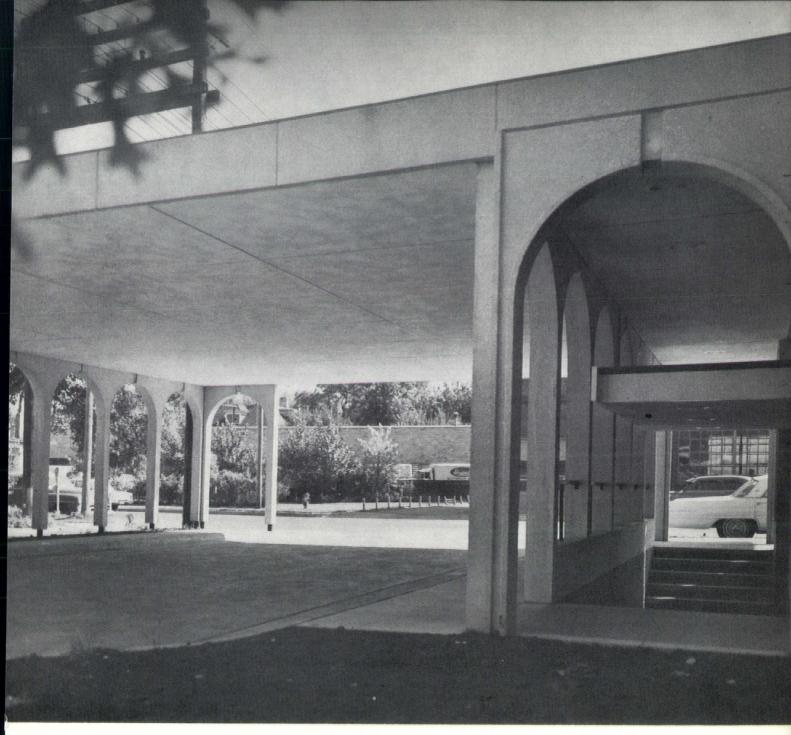
The major objectives of this remodeling project were first, to revitalize and add a degree of elegance to a small hotel which had undergone only minor change in thirty years, and second, to provide new entrance and desk facilities for people arriving by car.



Original Exterior



Site of Motor Entrance (At Right of Photo)



New Motor Entrance

Photographer, Remodeled Building: Julius Shulman

The motor entrance was located adjacent to the new hotel parking lot to allow tourists to go from car to desk to room without conflicting with the major banquet or meeting activities of the ballroom on the first floor.

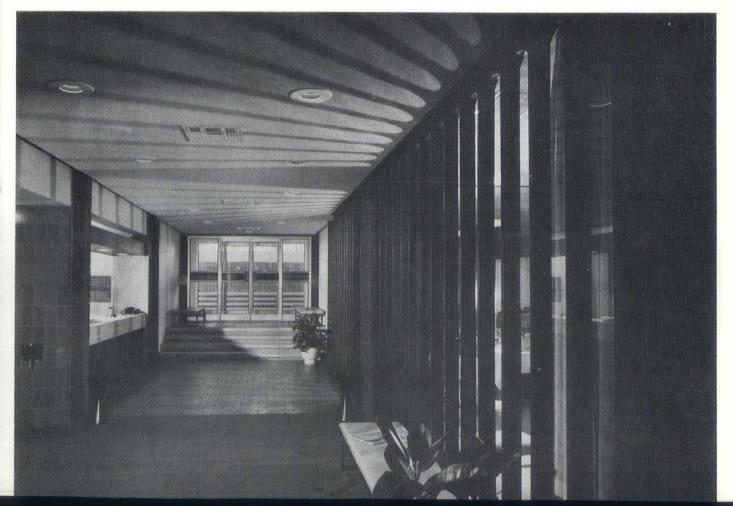




The first floor was completely redone with the exception of the ballroom, which was repainted and provided with a movable wall along one side for handling larger groups.

The basement, which had formerly housed only one small meeting room and barber shop, was completely reworked to provide for the motor entrance, registration desk, barber and beauty shops and two small meeting rooms.

Registration Desk at New Motor Entrance

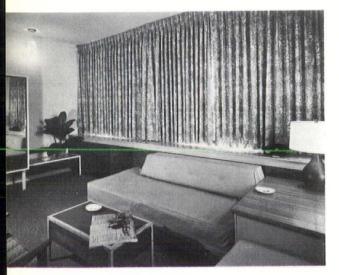


Original First Floor Lobby

Remodeled Exterior



Typical New Room



The exterior, which was in good condition, underwent only minor work, consisting of new entrances and refacing of the ground floor, the addition of an eighth floor and pointing of the brickwork.

Mechanically, equipment was added to completely air condition the building. Plumbing was changed only as necessitated by revised or added rooms.

In spite of the extensive work involved, the entire project was carried out while the hotel remained in operation.

All of the hotel rooms were redecorated and refurnished, with the smaller rooms combined to provide larger rooms and suites. An entire floor of rooms was added to replace those lost by the increase in size.

The kitchen and dining facilities were revised to provide various atmospheres for dining as well as provisions for serving dinner meetings.



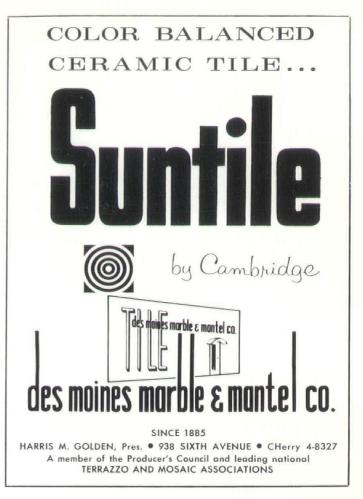
New Dining Room

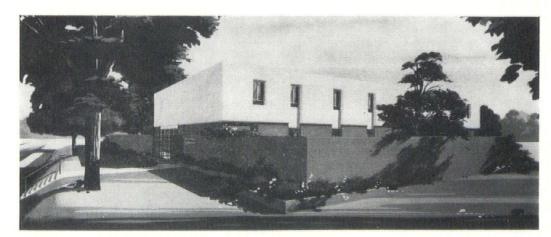
"OR EQUAL" CLAUSE . . . continued

First off, let me say that I am well aware that no man, however well informed he may be, however hard he works at staying abreast of new developments, can know everything there is to know about all the components that may be used in a building. Inevitably, out of the millions of dollars spent annually on research, new and unfamiliar products will issue forth in such numbers that awareness of them, let alone experience with them, exceeds any man's capacity to absorb. On that basis, the words "or equal" might be defended as an honest specification writer's confession of his own limitations.

And it might seem that a client, whose feelings are a strange compound of hopes and misgivings as he commits a sizeable share of his fortune to the architect of his choice, would welcome these words; "or equal." On the surface, they might seem to indicate open-mindedness to destroy any remote suggestion of connivance; to guarantee the lowest price at no sacrifice in quality or dependability.

But is that the reaction of a client who gives even a moment's thought to the question? Every one of us here has selected a doctor to guard his family's health. We made that selection because we believe the doctor has some expertise in his field. What would be our reaction if we were handed a prescription for a compound to contain "aureomycin or equal?" We'd think the doctor was out of his alleged mind, that's what we'd think. And we would think this despite the fact that scientific medicine dates only from Louis Pasteur in the latter half of the nineteenth century, is a johnny-come-lately by comparison with the construction arts, and is awash with at least as many





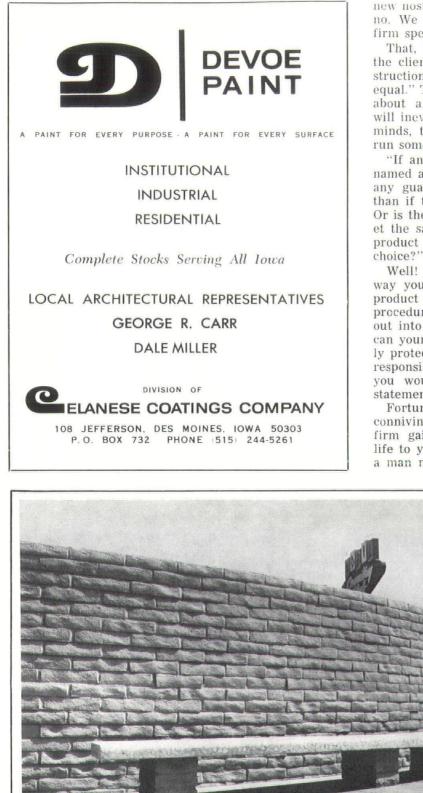
CONVENT FOR SISTERS OF CHARITY ST. JOHN'S PARISH, DES MOINES, IOWA. WM. R. MEEHAN DES MOINES, ARCHITECTS

HARVEST BROWN VELOUR FACE BRICK



ADEL CLAY PRODUCTS CO.

WEST DES MOINES, IOWA



new nostrums as there are new building products. No, no. We would not look kindly upon anything but a firm specification from our doctors.

That, I am convinced, is the inevitable reaction of the client who gives one moment's thought to a construction specification which contains the words "or equal." To the client who spends half an hour thinking about an "or equal" specification, another thought will inevitably occur. Clients have dirty and conniving minds, too, you know. Their train of thought might run something like this:

"If an 'or equal' product is substituted for the one named and some saving results, who profits? Is there any guarantee that I will pay less for the building than if the originally named product had been used? Or is there some chance that the contractor will pocket the saving, while I pay as much for the 'or equal' product as I would have paid for my architect's first choice?"

Well! Now the fat's in the fire for sure. The only way your client can be *certain* of benefitting from product substitution is under the "base bid, alternate" procedure. Then and only then are the savings brought out into the open for all to see. Then and only then can your client rest assured that his interests are fully protected. And I submit, gentlemen, that your first responsibility is to your client. Not one man among you would challenge the ethical propriety of that statement.

Fortunately, and this should occur to the dirty and conniving mind of the salesman of your firm, your firm gains stature when you explain these facts of life to your client. Too often, life being the way it is, a man must choose between personal aggrandizement

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and adherence to principle. But this is one of those rare and wonderful instances when you can have your cake and eat it, too.

From the maufacturer's point of view — or that of his distributor — it is no secret that a closed specification, under the "base bid, alternate" procedure, brings out his best bid first when his product is specified. Hanky-panky and holding back a better price is pointless and self-defeating. Oh, I'll admit that this takes some of the fun out of bidding for those who like to louse up the beloved old game of poker by making deuces and one-eyed jacks wild. What chortling goes on in the office of a sub who isn't forced to show his rock-bottom-so-help-me price!

But when the house rules call for a "base-bid, alternate" game, the man is a knucklehead who gives a competitor whose product is not specified a fat price to shoot at. He might just as well make him a present of the job and some extra profit to boot. He must face up to the sad truth that his buddy the contractor no longer controls the job, and that any price cutting on his part — once base bids are opened — is about as useful as whistling Dixie in an NAACP meeting.

Bringing out the best bid on the material of your choice, I am firmly convinced, is the short high road to *lower building costs* without the urchin handmaiden of *lower quality standards*. Equaly important, it keeps the control where it belongs — in the hands of men who, by professional qualification and lack of biased interest, should in all cases be the final arbiters.

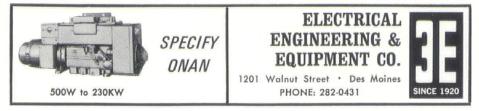
Clients expect, and rightfully so, to get wise and experienced council from you architects. They want candid expressions of opinion from you. If they doubted either the soundness of your preferences or the

 and
 Image: Source of the section of

Think About STAND-BY POWER

- What happens when power fails?
- How inconvenient or expensive is loss of heat?
- How important are corridor and exit lights?
- Do you need light in a stalled elevator?
- How important is the PANIC factor?

We are all aware of stand-by power needs in Critical locations such as Hospitals, Nursing Homes, Communications, etc., but ALL of your clients deserve to know about the advantages of automatic stand-by power systems. Why not discuss customer requirements with your consulting engineer; then SPECIFY ONAN . . . the complete stand-by system with UNIT RESPONSIBILITY. Contact Keith Wells, 3E's Onan specialist, on specific applications.



SCHOOLS FACTORIES OFFICES INSTITUTIONS LOCKER PLANTS BANKS APARTMENTS THEATERS STORES LABORATORIES CONTRACTORS CAB COMPANIES SERVICE STATIONS honesty of your reasons, they would not have come to you in the first place. They demand no such superficial show of good intentions and an open mind as the words "or equal" are presumed by some to convey. There is not one business executive of my acquaintance who respects an associate, a customer, a supplier or a professional counselor who is without convictions.

Your client looks to you for the protection of his interests in a field where you have great skill and he has none. If you fail to make the decisions he expects you to make, or if you so qualify those decisions that they become mumbled apologies for what you think, your client is getting less from you than your best.

I believe, and I believe most sincerely, that your opinion of your own worth should be at least as high as the client demonstrates when he commissions you to transform his broad objectives and vague hopes into concrete and practical reality. And every specification that is written is a revealing measure of the author's opinion of his own worth. Not only does it spell out to a man knowledgeable in his own trade the understanding the specifier has of that particular subject. It shows just as clearly whether the author is vacillating and unsure or incisive and self-confident.

Of course, this point of view reflects a selfish interest on my part, as you might suspect. I freely confess it. The same selfish interest is shared by all Producers' Council members here. Every representative of every company in the Producers' Council is proud of the fact that integrity is a basic ingredient of his product. We are anxious to argue our case before you as judge and jury. We believe that we can convince you that our products belong in the base bid specification.

FOF

All manufacturers who sincerely try to make their own products second to none in their field prefer to be judged by you. Conversely, manufacturers who live by price alone prefer to circumvent you whenever they can.

It is always possible in every product I know anything about, to make the product cheaper. In concrete, you heavy up on the gravel. In plastics, you use sawdust filler. In window glass, you sell glass that weighs 18 oz. to the square foot instead of 19 oz. where single strength is specified. In aluminum sash, you rely on the structural strength of the glass to hold the frame together and true. In such cases, the product will be cheaper, and it behooves us all to remember that the phrase "or equal" is more often than not taken to be synonymous with "or cheaper."

No manufacturer expects his products to command a higher price in the market place than others which are truly as good. If he cannot demonstrate to you some quality or feature which makes what he proposes to supply worth more in terms of strength, or appearance, or longevity or performance, his price must be no higher than that of the product with which it is compared. Under those conditions, if he can't cut the mustard, he'd better get out of the business.

But if specification control is not firmly held in the hands of men who are honestly interested in weighing quality as well as price, a manufacturer has no alternative, speaking metaphorically, but to add sawdust until he does compete. Every time that happens, there is loss of integrity to the industry of which we all are a part, and of which you men — because of your training and your disinterested position — must be the guardians.

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FIRE DOORS . . . continued

Another error is to assume that when two doors are installed on an opening (one on each side) in a fire wall, it is for the purpose of increasing the fire resistance rating of the protection to meet the rating of the wall. This may not be true at all. There are other reasons for requiring two doors, e.g., one of the doors may be blocked by stock or otherwise unable to close; if the portion of the building on the fire side of the wall collapses and the fire door is surfacemounted, it may be torn from the wall by the falling building; two doors give lower temperature on the unexposed side.

The following is from NFPA No. 80, Standard for the Installation of Fire Doors and Windows:

Class A openings are in walls separating buildings or dividing a single building into fire areas. Doors for the protection of these openings have a fire protection rating of 3 hours and except by special permission of the authority having jurisdiction shall be installed on each side of the wall.

Class B openings are in enclosures of vertical communication through buildings (stairs, elevators, etc.). Doors for the protection of these openings have a fire protection rating of 1 or $1\frac{1}{2}$ hours.

Class C openings are in corridor and room partitions. Doors for the protection of these openings have a fire protection rating of $\frac{3}{4}$ hour.

Class D openings are in exterior walls that are subject to severe fire exposure from outside the building. Doors and shutters for the protection of these

openings have a fire protection rating of 11/2 hours.

Class E and F openings are in exterior walls that are subject to moderate or light fire exposure, respectively, from outside the building. Doors, shutters, or windows for the protection of these openings have a fire protection rating of $\frac{3}{4}$ hour.

Since a fire wall serves an extremely important function, it is imperative that any opening in it be properly protected against fire.

Field installations often involve deviations from the assembly that has been tested, nullifying the label and resulting in an installation of questionable value. These unacceptable deviations can be summarized by the following "don'ts."

1. Don't install louvers in a fire door, even a louvered fire damper actuated by a fusible link.

2. Don't undercut a fire door.

3. Don't use any hardware (latches, closers, hinges, etc.) that was not shipped with the door or labeled as suitable for use with it.

- 4. Don't use any frame but a labeled frame.
- 5. Don't change the method of anchoring the frame.
- 6. Don't cut a fire door to install frames for glass.

7. Don't use a fire door as a vault door.

8. Don't consider a solid-core flush wood door the equivalent of a fire door (solid-core wood flush doors offer much less than 30 minutes' protection).

9. Don't accept the statement, "I can provide you with a door of the same construction as a labeled door, but not labeled and for a lot less money."

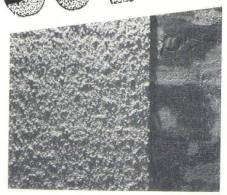
10. Don't visualize a fire door as a heavy, ungainly metal monstrosity. There are on the market attractive fire doors to fit into any type of decor.

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ERRATA

The *Iowa Architect* regrets an error in photo credits in the October-November-December 1965 issue. Photographs of the interior of the Architects Associated building were taken by Warford Studio of Des Moines.

DESIGN COLLABORATION DOCUMENT APPROVED

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

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

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

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

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

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KETCHUM RESIGNS FROM ADVISORY COMMITTEE

Federal policies on the design of highways within cities are producing "disastrous results" and are in "direct opposition to those of President Johnson," the president of The American Institute of Architects has charged in a recent letter to Secretary of Commerce John T. Connor.

Morris Ketchum Jr. FAIA, president of the Institute, resigned from the Secretary's National Advisory Committee on Highway Beautification because such membership, he felt, placed the AIA in a position of "tolerating, or even approving, policies of which it disapproves."

The AIA, Ketchum wrote, "is deeply concerned ... that although standards for design between cities are well developed and, in general, well utilized, these same standards are blindly applied to highway design within cities with disastrous results."

The Institute leader cited as one case in point the proposed elevated expressway to be located along the waterfront of the French Quarter in New Orleans which has been approved by the Bureau of Public Roads despite local and national opposition.

Ketchum suggested that the Highway Research Board of the National Research Council undertake a broad investigation of urban highway design. Citing the "excellent work on design research for interstate systems done by the Board," Ketchum pledged the assistance of the AIA and other allied professional organizations on such a study.

He gave as an additional reason for his resignation the fact that the professional Advisory Board of Urban Consultants of the Bureau of Public Roads and the National Advisory Committee on Highway Beautification have been restricted to advice and counsel on hypothetical, rather than actual projects.

Quoting a message of President Johnson's which included the statement that "roads themselves must reflect, in location and design, increased respect for the natural and social integrity and unity of the landscape and communities through which they pass," Ketchum wrote, "apparently his message has not reached the minds or hearts of those responsible for the design of public highways."



CURRIES GOLF STAG ATTRACTS SWINGERS

Once again, sports fans, the early summer air has been viciously carved up by the whistling purple shafts of the Travelling Freeloaders and Discussion Society, (TFDS) i. e., another Annual Golf Stag sponsored by Generous, Inc. (otherwise known as the Curries Company, Mason City) has passed into sports history.

The closing of the record books saw the smashing of a hundred-odd records, none of them of the slightest significance.

The refreshment supply cart was, as usual, dangerously driven to the farthest-flung of foursomes by Jack Weichman and (who else?) "Scotty" McDonald, the latter member of the team being quite properly restricted from the operation of the vehicle.

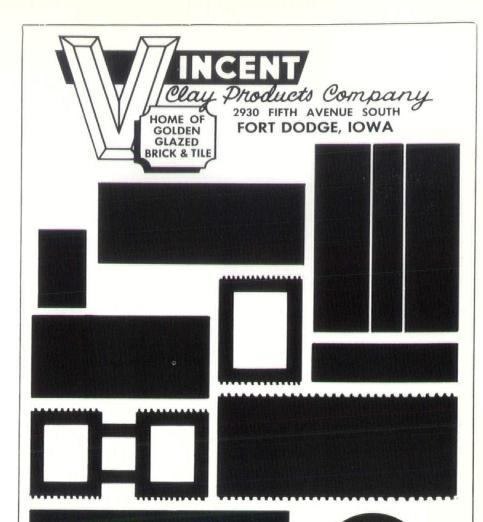
Dick Currie and Maury Doane hosted the 1966 version of a golf game and a feed that brings stars to the eyes if the most jaded freeloader.

The Des Moines Golf and Country Club, soon to be sliced by the Freeway, too, was the site of the play, and the excellence of the course and its buffet dinner cannot go unmentioned. The spread the Club furnishes is sufficient reason for the losing of one's cool.

ACGS is indeed becoming an institution of no mean importance, and although it will not likely become a legal holiday, the possibility of such recognition shoud not be discounted.

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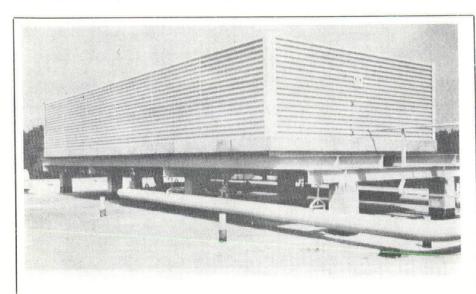
The excitement was indeed electric, and the second All-Iowa Electrical exposition and Conference held in Veterans Auditorium April 19-21 in Des Moines, Iowa has been counted an unqualified success by its sponsors, Iowa Chapter, National Electrical Contractors Association and allied industry groups, reports Donald Clark, Show Manager.

Nearly 2,000 buyers and buying influences including architects, contractors, municipal officials, engineers, and purchasing agents attended the exposition to visit displays in 102 exhibit spaces.

The exposition opened with more than 200 architects and engineers as special luncheon guests to hear Robert E. Koehler, Editor of the *AIA Journal*, Washington, D. C.

The conference, held separately at the Hotel Savery, attracted in excess of 220 persons for each of the sessions. Reginald H. Jones, vice president, General Electric Company, gave the keynote address. V. W. Kafka, URD Specialist, General Electric Co., discussed "Trends In Underground Electrical Distribution." W. G. Stimac, manager of lighting division product development, Westinghouse Electric Corporation told of "The Real Challenge of Electric Heat." "Tomorrow's Marketing Challenge" was the subject for Robert A. Strain, manager of utility relations, The Maytag Company.

Clark said that the success of this event means that it is now firmly established and that plans are already underway for the Third All-Iowa Electrical Exposition And Conference in 1968.



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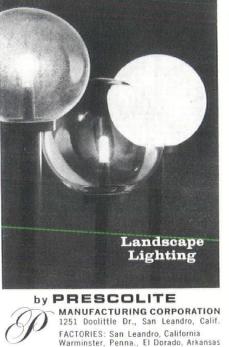
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