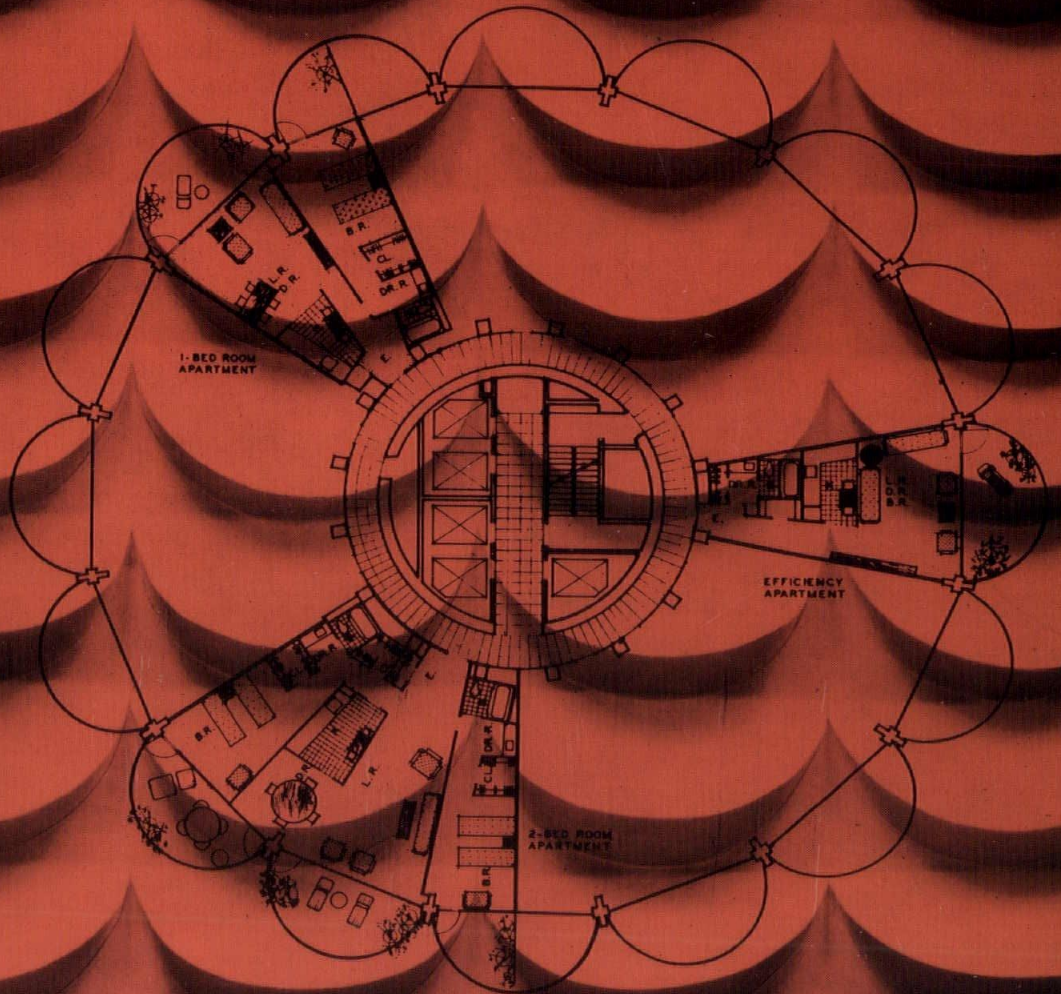


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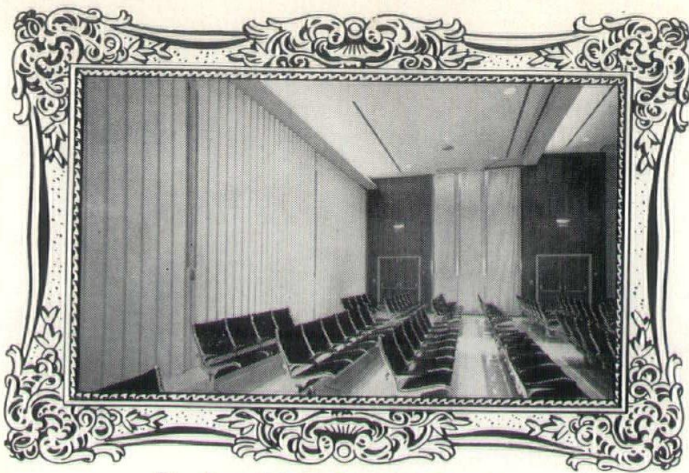
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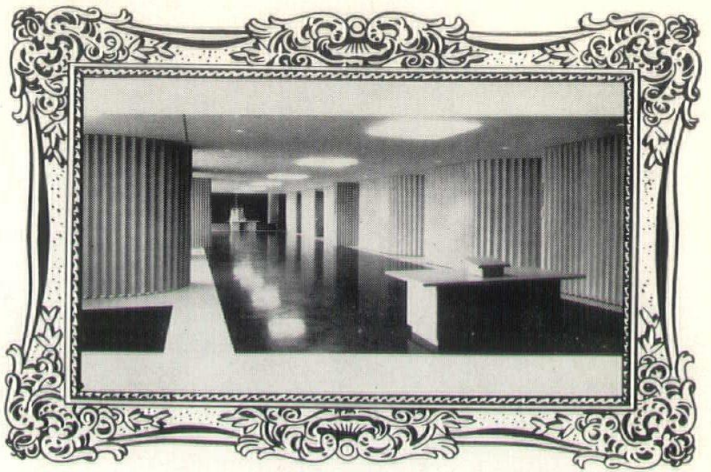
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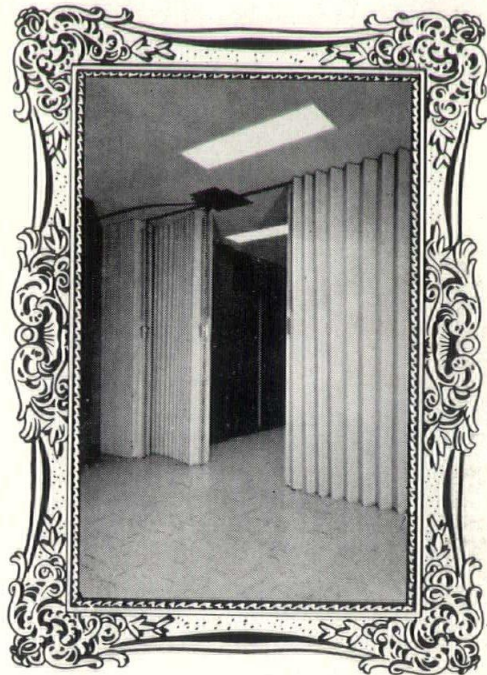
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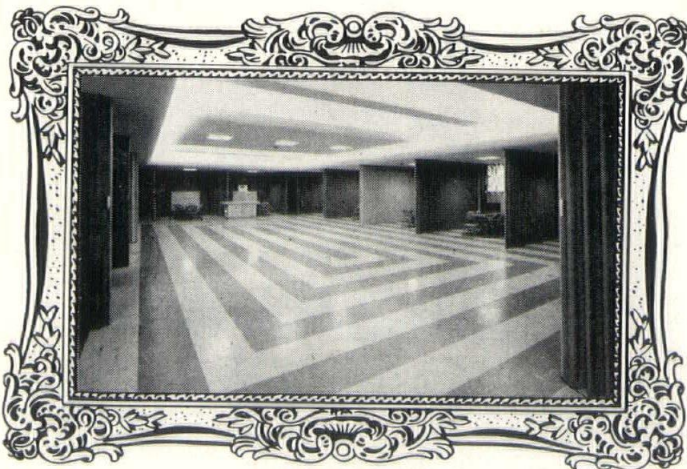
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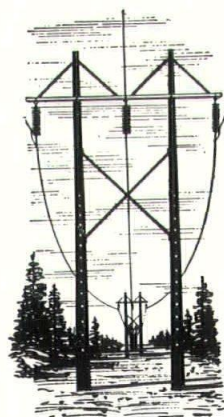
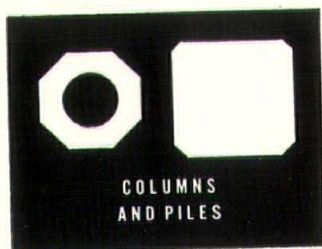
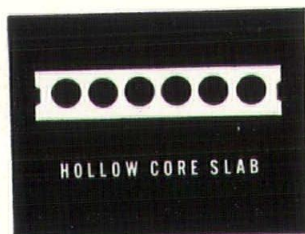
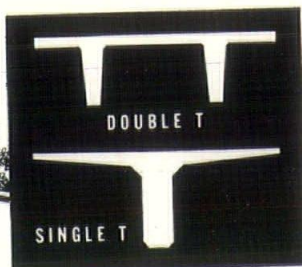
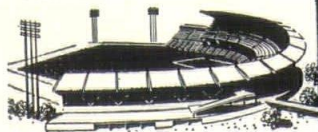
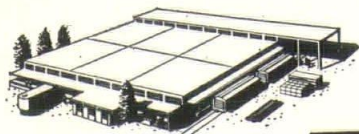
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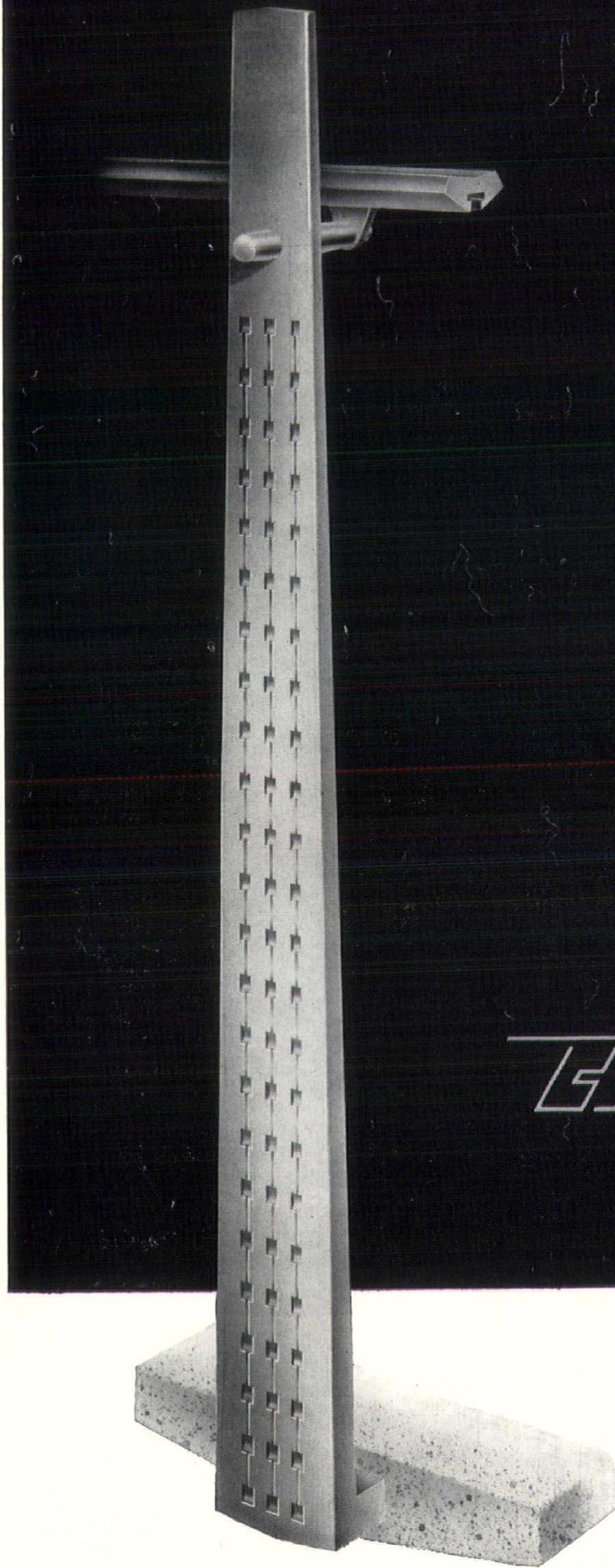
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# THE ARCHITECT



OCTOBER 1963

Wisconsin Architects Foundation has mailed samples of its 1963 Holiday Greeting Card to all Corporate Architects and to a selected list of Organizations associated with the Architectural Profession. Profit from sales is for the Foundation's program of aid to architectural education, both for tuition grants and the effort to establish a College of Architecture in Wisconsin. The Directors of the Foundation, all State A.I.A. members, invite your earnest consideration of this handsome Holiday Greeting Card and the important purpose for which it is intended.

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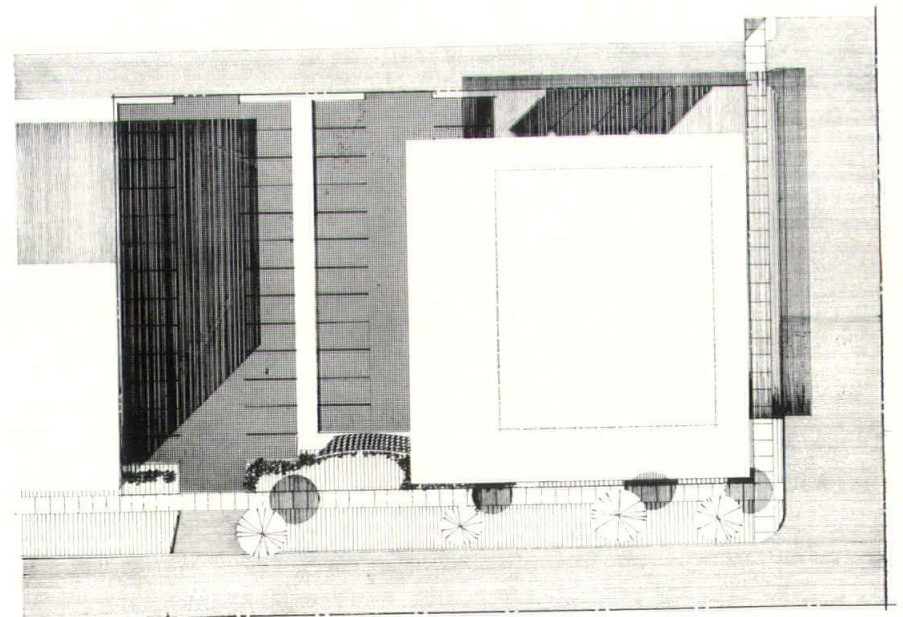
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1963 merit award / office building



SITE PLAN





VON GROSSMANN, BURROUGHS, VAN LANEN/architects

The new office building for the Milwaukee branch of Arthur Andersen & Co., an international accounting firm, designed by von Grossmann, Burroughs, van Lanen, Architects, received one of the coveted Merit Awards at the 1963 Honor Awards Program.

The structure, erected on a site of approximately 120' - 200' at 759 North Van Buren Street in close proximity to the major banks and legal firms, on the "fringe" of the financial district in Milwaukee, has caused a lot of comment. It has no windows.

The jurors, Alfred Shaw, FAIA, Harry Weese, FAIA and Ralph Rapson, AIA questioned this concept and its psychological effects on confining employees in a windowless building. However, they agreed: "The building has careful detailing and is well proportioned with the heavy massing above ground."

According to Fritz von Grossmann, Senior Partner of von Grossmann, Burroughs, van Lanen, Architects: "A happy but unusual architect-engineer relation was afforded quite coincidentally. Skidmore, Owings & Merrill, Architects-Engineers, are commissioned to review all construction programs for adequacy and conformity to space standards for the Arthur Andersen company. Jack Train, AIA of S.O.M. in reviewing budgets, accepted our invitation to S.O.M. to engineer mechanical and structural for this project. The design we proposed and developed was enthusiastically received by S.O.M."

The need for flexibility of partitions to provide offices for approximately 35 executives, and economy both in terms of construction and maintenance, were factors leading to the final windowless concept.



The five other basic requirements by the client which von Grossmann, Burroughs, van Lanen had to take into consideration were: Identity of the building to be established by the use of walnut panelled entrance doors, an Arthur Andersen & Co. symbol.

Professional offices were to be located on the second floor. Service requirements to be located on the first floor or in a basement. Ample parking space was to be provided. A specific number and relationship of partner offices to staff offices, secretaries and auditing spaces.

Based on these requirements, the architects designed a two-story and basement structure with approximately 21,000 square feet of floor space. Professional offices and related facilities accounted for nearly half of the 21,000 square feet floor space. Since these offices required privacy and a close relationship, it was decided to place them all on the second floor. The service areas were split up on the ground floor and basement. This allocation of needs resulted in the cantilevered second story.

The cantilevered second floor also allowed the architects to allocate as much space as possible to parking on the relatively small site and to provide some covered parking.

The lower floor setback on the two street sides allowed for a landscaped paved area which gives a better space relationship of the building to the public walk.

A serpentine screen wall of aluminum shapes was placed next to the building to screen parking and provide a foil for the simple severity of the building forms. Anodized black and natural aluminum colors were placed to form a pattern. Heavy panelled walnut entrance doors with discreet lettering, the symbol of the company throughout the world, providing the sole identity of the building, were placed inside the vestibule and protected





against warping, expansion and contraction by using heavy glass doors on the exterior.

Simplicity was the keynote to the entire building, interior and exterior. Precast panels of white concrete containing crystalline quartz aggregate form the walls of the second floor. The panels are framed and flashed in stainless steel. Charcoal black brick was used on the first floor exterior and in the lobby. The ground below the overhang is paved with panels of Mexican river stones.

Interior walls are of light block and

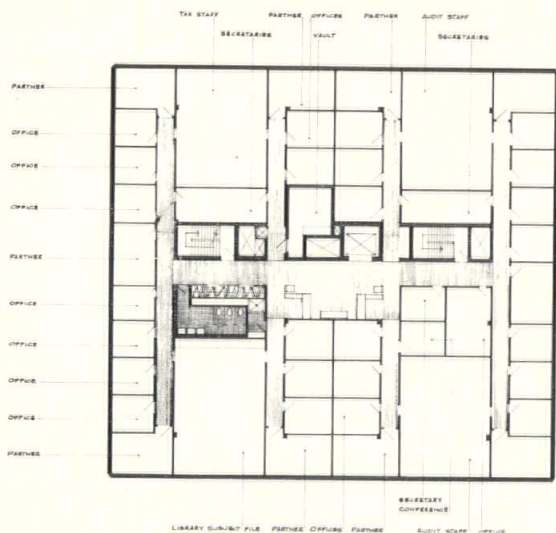
steel studs. The wall finishes are of plaster and natural walnut panels. The ceilings of acoustical tile, floors of terrazzo and resilient tile.

The building is of steel framing construction throughout. Metal cellular floors with concrete topping and metal roof deck. Electrical and telephone lines have been run in a Q-deck flooring system at considerable savings. Forced warm air is distributed through ceiling diffusers. The condensate from the steam is circulated through a coil system in the cantilevered floor to dissipate heat be-

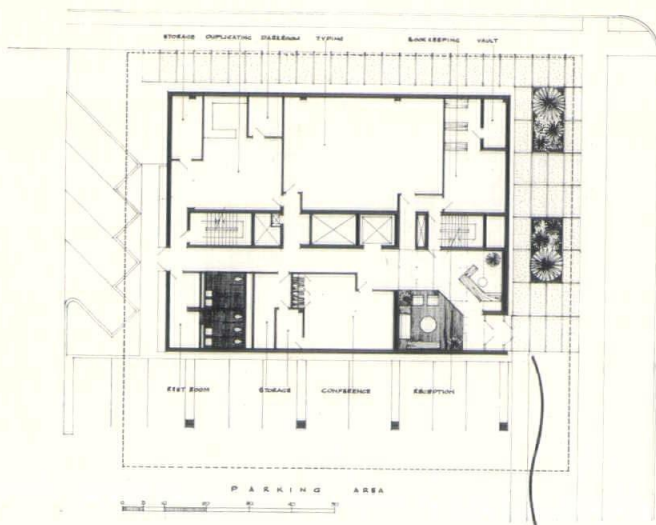
fore being run into the collecting system.

The firm of von Grossmann, Burroughs, van Lanen is justly proud of Skidmore, Owings & Merrill's probably only "association" adventure with another architectural firm wherein they were the engineers and the local firm the architects.

Von Grossmann, Burroughs, van Lanen pioneered a provocative yet disciplined, a functional but aesthetically appealing structure.



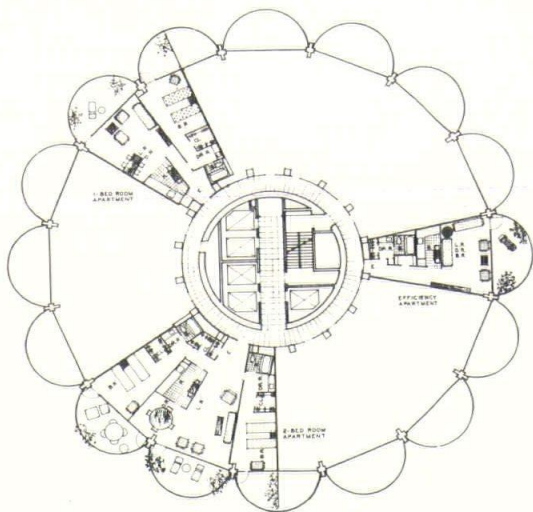
Upper Level Floor Plan



Lower Level Floor Plan







## the new urban plan

BERTRAND GOLDBERG, AIA

Marina City, now in construction on the north bank of the Chicago River at State Street is a \$36 million project. And we have been planning and building it for the past two and a half years.

How did Marina City start? Three of us were at lunch three years ago when William McFetridge, who had been for more than 30 years, President of the Building Service Employees International Union, started Marina City. His thought was to save the Center City Areas of America, where his 275,000 members held most of their jobs. His thought was to rebuild the strength of our urban centers. William McFetridge very simply wanted city people to come back to live in the center of town.

This concept of Center City living, I have taken to calling the McFetridge plan. Marina City is the McFetridge plan at work — 24 hours a day, 7 days a week.

Marina City is not only a plan for housing in Center City areas, but it combines housing with offices, with shops, with recreation, with culture, with health. Marina City is a city within a city.

Marina City is in direct conflict with the ideas which have dominated our real estate planning since the first World War. I like to refer to these more than 80 year old ideas as our Victorian Renaissance. These ideas came to us from the Victorian scientific planning concepts of the late 19th century.

The Victorian era was a period of divide and conquer in politics and in

City planning. The Victorian man was divided into pieces of production and procreation. He was to be housed on a scientific basis in suburb A, work in town B, and play games in park C.

This three part man never existed, but we have been planning and building for him in American suburbs for the last three generations.

The Marina City concept puts the three-part man back together again. We say in the Marina City plan that people enjoy the warmth of mixing their living and working and playing and talking. People enjoy the excitement of what used to be called the market place in the ancient cities of the world. The country boys who account for 50 percent of the new growth of city populations like the changing light patterns from daylight, nightlight, from fluorescent, from neon.

And the ex-suburbanites who are beginning the move back to town find once again the stimulation of people living together in high density, find music, find museums, find education in a measure which they had missed in the supermarkets of suburbia.

I have previously told all of this to my mother-in-law. I described to her how at Marina City the apartments began on the 20th floor and went up to the 60th floor. I told her how you could come down to your office building in the morning and go to work without commuting. And how you could swim and boat and skate and go to the theatre all without walking more than a few hundred feet.

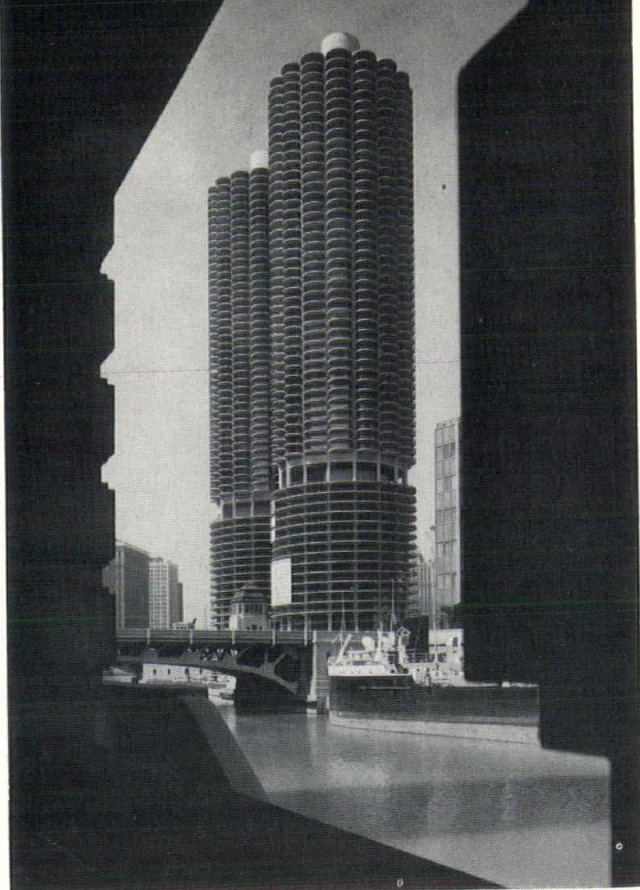
And her comment was: "That's what we used to call living above the store."

In the community where "living-above-the-store" is still possible, certain of the critical and difficult problems which are a part of our today's downtown Central City life doesn't exist. There is no commuting problem, except to get downstairs to work. There is no service problem. The high population density makes all services available, cheaply and quickly.

There is no "cultural" problem. The community is its own culture; the museum or the concert is the "guy next door" — and not the trip which must be deliberately undertaken to absorb a higher experience. There is more leisure and more ways to use it for the man who "lives above the store."

There is another interesting by-product in taxes and all other kinds of building expense. It costs less to live above the store than it does to live away from work. And I wonder, now that the architects have undertaken the job of making it attractive and enjoyable to live above the store if any community can afford a Central City which is used only on a part-time basis.

Several weeks ago, I had occasion to inspect Park Avenue, near Grand Central Station. The former buildings which used to be shops, offices and apartments are being replaced by super office buildings which will line both sides of Park Avenue and crown Park Avenue above Grand Central.







The service facilities which will be installed for this increased building volume will be fantastic. Tremendous new installations of electric power, telephone, suburban trains, steam, police, traffic supervision will all be supplied either by the taxpayers or by franchised corporations.

But there is another factor which will have to enter this planning: A 24-hour a day population is being replaced by a 7-hour per day population for a period of only a 5-day week.

Our growth of leisure time results in two by-products: One, we are most familiar with: More time to devote to leisure activities; the second by-product is the idle standby time of our specialized areas of offices, factories, and urban services, public transportation, streets, sewers, water supply lines, generating facilities, gas lines, a police force, a fire department. Twenty years from now, it is conceivable that Park Avenue, during half the week, will look like Wall Street on Sunday.

I ask whether any community can be so rich as to pay for the Central City based on a use of 30 to 35 hours per week. There are very few corporations which can pay for elaborate factories without two shift operations, and I believe our economy and the tax structure which is the reflection of our economy demand the two shift Central City.

Central City planning must provide

within the same taxable unit, the greatest living use of physical plant for a 24-hour period, 7 days a week, summer and winter. Our downtown areas must produce rents and earn money around the clock in order to survive.

I mentioned earlier that William McFetridge last week signed the papers which completed the Marina City financing. This financial planning which has been under the guidance of Charles Swibel was keyed to the Center City concepts of the McFetridge plan.

It was obvious to Swibel from his financial experience as treasurer of the Chicago Housing Authority, that the Marina City financing could not be put into one package. He broke down the financing into three parts.

The housing was planned to become an FHA insured mortgage, and the office building and the theatre building were planned for a conventional real estate mortgage.

The equity position would be taken by the Building Service Employees International Union, together with two of their locals, and one of their health and welfare funds. This equity position was undertaken as a real estate investment, which would provide a substantially greater return than the usual type of bond investment for these groups.

The success of Swibel's financial planning was demonstrated last week when two things happened:

1. A bank loan was negotiated on the commercial portion of Marina City.

2. The FHA mortgage on the housing, previously secured only by a FNMA commitment is being negotiated to a group of banks at the highest going market price. This was the largest single FHA insured mortgage ever negotiated and was in the amount of \$17,800,000.

There are other overtones of successful financial planning which Swibel also announced last week: the Marina City garage was leased for \$5 million over a 25 year period. And there are over 2,000 applications for the 900 apartments. The commercial building area is about 1/3 spoken for.

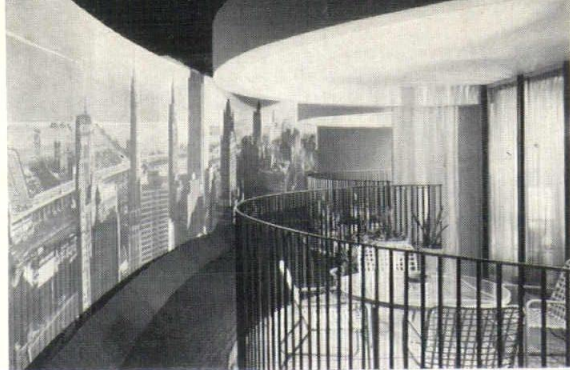
\* \* \* \*

The McFetridge Plan for Center City living, and Swibel's ideas for the financing were the program for which we designed Marina City. Together we made a team of the sponsor-dreamer, the manager, and designer.

The land in which Marine City is located is in the midst of a forest of high buildings. Marina City itself, will occupy almost a square block between State Street and Dearborn Street on the north bank of the river.

We have talked about space previously. In Marina City, we have eliminated the concept of the street. We have created a plaza in the best classical sense of the city square; and on the plaza, we





have erected five interrelated buildings.

The plaza in itself marks the disappearance of the corridor street. The plaza becomes the open platform on which automobiles and people, alternately passengers and pedestrians can wander as they choose. Also, in terms of space here in Marina City, we have done what a few cathedrals in Europe are able to do. We have reached up for a piece of vertical space, which is thrilling to men everywhere.

There are five buildings within this space.

The first building consists of a two-story commercial platform of reinforced concrete post and beam construction which covers the entire three acres of property. This lower building contains all of the going and the coming — the commerce, the health club, the package room, the lobby, the restaurant, the marina for the storage of 700 boats, with the water penetrating into the interior of the building.

The second and third buildings are the 60 story residential towers, built around concrete cones 35 feet in diameter and 600 feet high.

The fourth building is the theatre building, with a roof built of precast concrete supported on a catenary system stretched across a concrete frame. This is the Marina City Center.

The fifth building is the office tower which forms a background and a fence to mark off the end of Marina City and

to protect Marina City from the inroads of the yet undeveloped areas to the north. This structure is a concrete bearing window system which supports a monolithic concrete floor and beam system.

Marina City at night is a lighted city. The question of the difference of appearance between daytime and nighttime is an important design factor for urban centers — not so much for the suburbs, not so much for the countryside, but in town where people will live with a structure 24 hours a day, the difference in appearance between the structure summer and winter, and day and night becomes a change of tremendous importance.

Marina City has been carefully conceived in two terms of scale determined by a far view and a close view.

We decided that Marina City would be seen first from the opposite south bank of the river by people approaching on both the State Street and the Dearborn Street bridges as well as from Michigan Avenue. This distant view has no scale except as compared with other high buildings in the vicinity. Marina City will stand out in the distant view as an intriguing, geometric texture of concrete forms in the twin towers against a carefully controlled quiet composition of the background commercial building. The theatre building will not be visible to any large extent.

Upon approach to Marina City, the

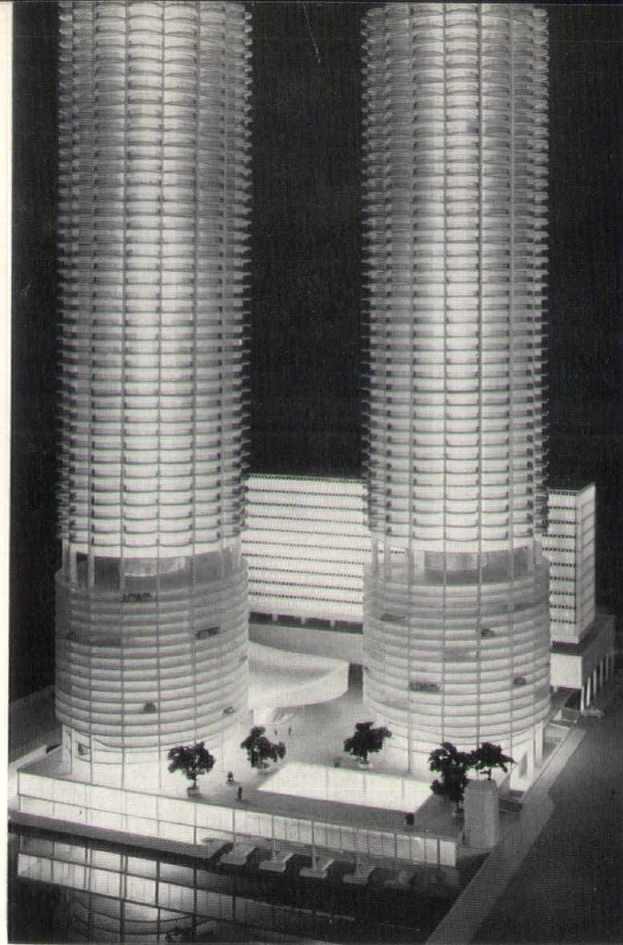
scale changes tremendously. The towers disappear up above and the pedestrian or the automobile passenger is concerned only with the immediacy of his view.

The near view requires a relationship to human size. For this relationship, we have used the Marina City Theatre. The moving form of the theatre and the sculptural quality of the concrete design has a degree of intimacy which none of the other structures at Marina City has. The theatre, itself, we call the Marina City Center, because it is at this point that people will disembark, and it is from this point that people may reach any other portion of the Marina City under cover with automatic forms of transportation — the escalator and the elevator.

At an early time of our design, we felt that Marina City required a sizable area for a garden. Later, as we worked through our design, we realized that the size of the garden was not so important as the ability to relate the garden to human scale. In this fashion, we conceived of a design for a sculpture garden, which would surround a sunken skating rink, located near the river front of Marina City. Here it is that people may gather in small groups, talk, sit, contemplate the river, the boats, or the kinetics of the changing lights of the city before them.

Each tower has been designed as a central core which contains the elevator shafts, the stairways, all of the utilities,





and out from which radiate all of the apartments. The central core is 35 feet in diameter. The overall is approximately 105 feet in diameter.

The central core is a structural concrete cylinder. It resists the wind and it helps support the building. The shape of the core means that these buildings have only 30 per cent of the wind resistance that they would otherwise have with the same dimension, but in a rectangular form.

I strongly feel that the shape of these buildings has a relationship of a tree to its branches. We have built at Marina City tree houses as compared with conventional apartments of cellular design, where each apartment has the relationship of a cell to a beehive.

There will be 32 floors of efficiency apartments and one-bedroom apartments. There will be eight floors of one-bedroom apartments and two-bedroom apartments. The buildings will contain 60 per cent one - bedroom apartments, 30 per cent efficiency apartments and 10 per cent two-bedroom apartments.

No apartment door faces into any other apartment door, but rather each apartment door is connected to its trunk — to the core of the building. We feel on a subjective level that this produces a feeling of immediacy and a feeling of the individual house which is not experienced in the beehive type of planning. Each apartment radiates from the core — like the petal of a flower.

These buildings have been described as cylindrical. This is not true. The organization of the building is rather the organization of a tremendous sunflower — where the core is the center of the flower and each of the bays emanating from the core are very much — both in shape and in organization — like the petal of a flower.

The efficiency apartments occupy each one of these petals. The one-bedroom apartments occupy a petal and a half; and the two-bedroom apartments occupy two and a half petals.

The efficiency apartment develops from the core placing the dressing room and bathroom closest to the core where the restricted space makes this most feasible. The kitchen comes next and finally, at the outside of the building, where the function of building requires the greatest amount of view and light and sensation of openness we have our living room, dining room, sleeping room combination. Beyond this lies the balcony which is 10' by 20' wide in approximate dimensions with a sensation of continuing expansion of space. When we step out on the balcony, we are at the extreme outside of the petal of the flower.

In the one-bedroom apartment we construct the functional aspects of the apartment to the narrow dimension of the flower petal and expand the apartment continuously from the center on toward the outside. Yet, with all of this expand-

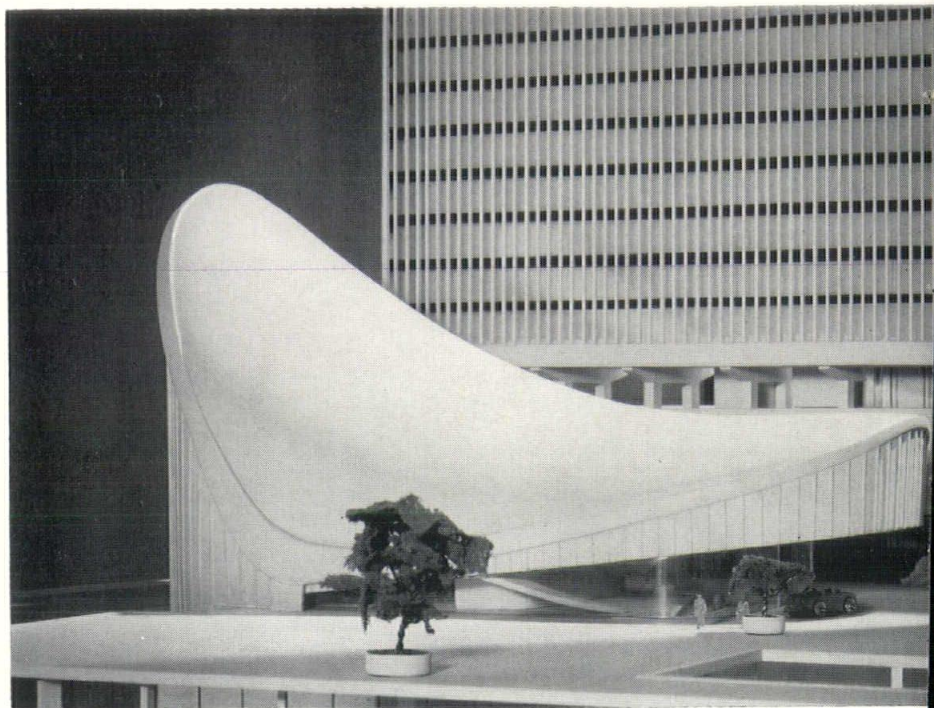
ing space, we have a lower ratio of glass area to square footage of living space than most apartment buildings. This produces an efficiency for heating and air conditioning. All apartments will be air conditioned. You can note in the one-bedroom apartment that each outside room has a balcony space of its own, and in this fashion, the one-bedroom has a half-balcony sharing the other half with the one-bedroom apartment which backs up to it.

The balconies serve a double function. In the first instance, they permit the expansion of living space, but in the second instance, they permit the easy maintenance of windows with washing, painting and tuckpointing and finally, they permit in this realm of practicality the easy maintenance of the heat pumps which both heat and cool the apartments. These are located outside over the balcony doors.

We have used our automobile budget to elevate the apartments above the noise and dirt of the streets. Then by the careful planning of the commercial areas — swimming pool and service areas below the plaza — we have managed to create a feeling of openness and expansiveness at the pedestrian plaza level.

The commercial building has been designed as a backstop to our residential towers. Here again, we have continued our use of concrete as a material relating the office building to the residential tow-





ers through the use of a single material. We have designed our office building wall as a texture, rather than as a revelation of the special structural system. The office building shelters the project from the undeveloped area lying to the north.

The theatre building is the building which will be seen in terms of greatest intimacy by the approaching pedestrian or passenger. This is a building which has an intimate and human physical scale of forms.

#### The Central City Plan

City planners are usually the last people to arrive at the ideas of their time. After the idea has jelled, after the demand for a living pattern has been clearly expressed by the "consumer market," the planner uses the idea. And this goes for the banker who finances the plan.

This procedure of the planner bringing up the rear with the help of the banker is, in the great scheme of things, proper. The stakes are too great, both in terms of human life and money to allow the planner more than the role of showing the public the ideas which it has already accepted.

The England of the early 19th Century had already enthusiastically undertaken the idea of industrialization when the planners first began to place the houses around the factory. Later in the Century, the ideas of Ruskin and Morris had already been put on wallpaper when the

planners used these same ideas for the "garden city."

Our plans for the ideal residential community, the suburban community, separating the city from the country, have their roots in the scientific planning of more than 80 years ago. And the plan for the high-rise city apartment surrounded by an expanse of unusable, unwalkable, green grass belongs to the concepts of organized urban society dating back 40 years.

We acknowledge that we follow "precedent" as planners — but for bankers who expect the economic life of a project to extend through the next two generations, it is important to know we are following this year's "precedent," and not the one which is already downgrading last year's projects.

There is a new "precedent" in this year's planning: in Baltimore, Philadelphia and Boston; in Pittsburgh, Cleveland and Detroit; in Chicago, St. Louis and New Orleans; in Denver, Los Angeles and San Francisco — there is a new plan. The new plan is to make the Central City habitable.

The new plan has economic roots. We wish to save our investments. But the new plan has human roots. People like to live closely and enjoy the work and the play which is the by-product of high density living.

If you could take a giant cookie cutter and take out a section of Chicago's Loop, take all the human activities whereby

people express themselves throughout a 24-hour day, and reshape this cookie into a vertical pattern to occupy a square block — if you could do this, you would have the Marina City plan.

Marina City is a mirror of the city:

a. **High density living** (300 families per acre)

b. **Working space** (180,000 square feet of office)

c. **Recreation** (boating, swimming, skating, gymnasium, bowling, walking, parks, movies, meeting hall)

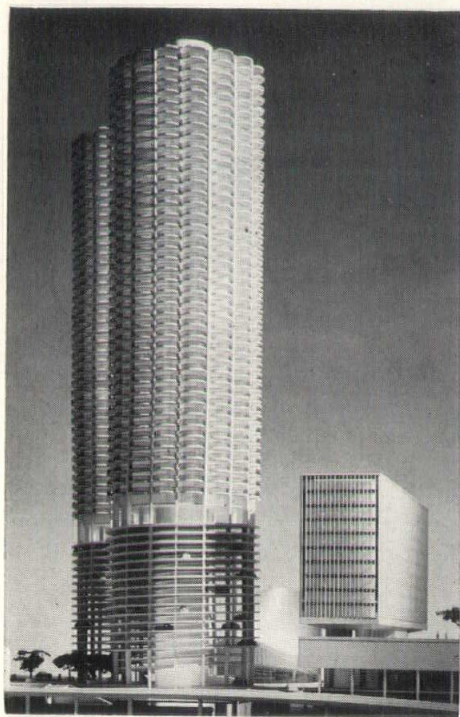
d. **Service** (restaurant, shops, automobile parking, transportation)

Marina City is a plan for 24-hour living, which no tenant could afford on less than a 24-hour basis. This means that the facilities for living pleasure offered by Marina City cannot be supported by a commuting population, or a weekend population. And if housing is something more than just shelter and running water, the new housing must provide the background for the leisure time which our work patterns are giving us.

"Urban Renewal" plans have already established a concept of rebuilding an entire cross section of our Urban life. We rebuild houses, shops and work space.

But beyond "Urban Renewal," there is an established market, a voiced demand and a public consciousness to provide for people once again, the balanced life of a Center City. More than 3500 applications for Marina City living already received testify that people want to





live together with their work and want the recreation and the moderate rents which can be offered in high tax, high cost areas, only by tapping a 24-hour source of income.

Marina City income is divided about 1/3 to upkeep costs and 2/3 to debt service, but neither of these costs could be supported by residential income alone. Over 39,000 families have indicated a desire to live in the Central City area by survey made in April, 1959. Few of these families could afford the Marina City tax rate which would be close to \$400 per year per apartment. Few of these families could afford the cost of amortizing recreational facilities provided in Marina City. And without a balanced daytime and nighttime population, the cost of operating either garage or swimming pool would rise beyond the ability of the Marina City tenant to pay for these facilities.

Marina City, therefore, is the new plan for the balanced living which Central City must provide. As the farmer has understood that his house means house and barn; as the suburbanite has understood that his house means house and garage; so does the Urbanite understand that his house means *House and Work and Recreation*. This is Central City housing.

Photography:  
Hedrich-Blessing

### Critical Path Method Seminar

On Monday, November 11, following the homecoming weekend of the University of Wisconsin-Madison, a seminar "Critical Path Method" is scheduled to be held for architects and engineers at the Wisconsin Center Building in Madison.

The purpose of this seminar is to survey the Critical Path Method as it applies to architects' and engineers' offices as well as how its use by the contractor affects the information to be included in the plan.

Registration starts at 8:30 a.m. Cost for the day, excluding evening dinner, amounts to \$15.00. Bruce M. Davidson, Dean of the College of Engineering at the University of Wisconsin, will welcome participants at 9 a.m.

9:15 a.m. — Noon: E. R. McCamman of Giffels, Rossetti, Inc., Architecture and Engineering firm in Michigan, will speak on the Critical Path Method as pertaining to planning, scheduling and cost analysis in an architect's office. Giffels, Rossetti, Inc. have applied the Critical Path Method in their office with great success.

1:15 p.m. — 3:15 p.m.: R. J. Petersen, Special Projects Coordinator with Henningsen, Durhan and Richardson, Engineering and Architectural Consultants of Omaha, Nebraska, will speak on the practical application of the Critical Path Method in the architects' and engineers' offices.

3:30 p.m.: A member of Arthur Andersen & Company, Milwaukee, presents a construction case in which the Critical Path Method has been successfully applied.

\* \* \* \* \*

**Third Annual Institute on Construction Contracts and Specifications** is to be held on November 7 and 8, 1963 on the Madison campus of the University of Wisconsin.

This Institute will be a two-day educational meeting in which current information on preparing contracts and specifications will be presented. It is offered in response to the needs of the construction industry to keep familiar with continually changing technology and conditions. It will be of interest to architects, engineers, material suppliers, contractors and others concerned with the preparation, use, interpretation or improvement of specifications and contract documents used in all phases of the construction industry.

Guest lecturers will be architects, engineers and attorneys from all parts of the country. Topics to be covered include the CSI format, writing of speci-

cations, legal principles, landscape development, and the use of the Critical Path Method as adopted to producing plans and specifications.

Tuition fee of \$35.00 will cover cost of the course, materials and meals but not the cost of lodging.

Inquiries to be directed to Edward O. Busby, Room 725, Extension Bldg., The University of Wisconsin, Madison, Wisconsin, 53706.

\* \* \* \* \*

Chairman Mathias F. Schimenz of the Industrial Commission in a letter of August 15, calls attention to the alarming injury frequency rate in Wisconsin's construction industry. He states that some forty injuries, as compared with fourteen injuries per million man hours worked in manufacturing industries, are reported to the Industrial Safety and Building Division.

Chairman Schimenz calls for an all out effort to correct this situation: "We are persuaded that an intensive voluntary safety program initiated and operated by construction employers with labor's cooperation is preferable and more effective than the imposition of additional compulsory safety laws and regulations. We believe the industry should be given the opportunity of improving its safety experience on a voluntary basis."

The Construction Safety Committee, which acts in an advisory capacity to the Industrial Commission, has mailed to more than 5,500 contractors in Wisconsin recommended guides for setting up a basic safety program in the construction industry.

\* \* \* \* \*

Mrs. Jane Richards, Executive Secretary of the Wisconsin Chapter, American Institute of Architects, attended the Annual State Executives Meeting on July 15 and 16, held at the Octagon in Washington.

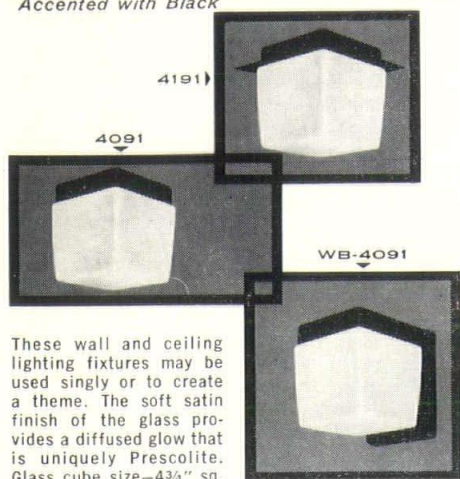
\* \* \* \* \*

On Tuesday, October 22, 7:30 p.m., all members of the AIA, Wisconsin Chapter, are invited to attend a program sponsored jointly by the Structural Committee of American Society of Civil Engineers, Engineers and Scientists of Milwaukee and the American Institute of Steel Construction at the Pfister Hotel in Milwaukee. The new Sixth Edition of the Manual of Steel Construction will be available for a fee of \$5.00. A program with color slides of new steel structures is planned. Lunch and refreshments will be served after the meeting by the Society of Iron and Steel Fabricators of Milwaukee. For information call: W. H. Hart, Milwaukee WO 2-0430.



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## WISCONSIN STUDENTS RECEIVE TUITION AID

Wisconsin Architects Foundation has made tuition grants totalling \$1800 for nine qualified Wisconsin students of architecture to be applied against out-of-state tuition for the first semester of the academic year 1963-64.

Nine students were given similar support, at \$200 per semester, totalling \$3600, for the two semesters of the academic year 1962-63, and of these three were graduated with a B.A. degree in June, as described in the September issue.

At their meeting of September 6th, the Directors of the Foundation approved continuation of tuition aid for the remaining six, and for three new students who qualified from among applications and recommendations received.

To qualify, a Wisconsin student of architecture must have a superior recommendation from the accredited college attended, he must be in actual need of financial assistance, and his cumulative grade point average must be high. Aid is not given until a student has completed satisfactorily two or more years of architectural training.

It is rewarding to note that two of the "old" students, for the semester past, one had a straight A average, and the other missed a straight A average by a small percentage due to his unfortunate failure to realize that an important examination had four pages rather than three.

Listed below are the six students continued, and some information concerning the three new students:

Richard J. Jarvis — Sheboygan — Illinois Institute of Technology — 5th year  
Patrick Kenneth Jadin — Green Bay — University of Oklahoma — 4th year

John M. Rakocy — Milwaukee — University of Illinois — 4th year

Richard H. Kuehl — Sheboygan — Rhode Island School of Design — 5th year

Victor Aufdemberge — Berlin — University of Nebraska — 3rd year

William B. Bauhs — S. Milwaukee — University of Illinois — 4th year

Ann C. Esch — La Crosse — University of Washington

The Foundation is pleased to announce its first female student to receive tuition aid. Miss Esch transferred to the University of Washington after two years at Lawrence College and she is now in her Junior year. Besides a full class load, she managed last year to hold two jobs, totalling 24 hours a week. This summer she worked for Architect Carl Schubert, La Crosse. The College of Architecture at Seattle has much confidence in her future.

Richard Koshalek — Madison — University of Minnesota

Recommendations from both the School of Architecture at Minneapolis, emphasizing his ability in design, and State Architect Galbraith were received for this student. He is beginning his 4th year of training.

Charles Tichy — La Crosse — Iowa State University

This student is entering the fourth year of architectural training with a cumulative average of 3.39 (4.0) and a fine recommendation from the Department of Architecture at Ames, Iowa. The past two summers were spent in the office of Architect Carl Schubert, La Crosse.

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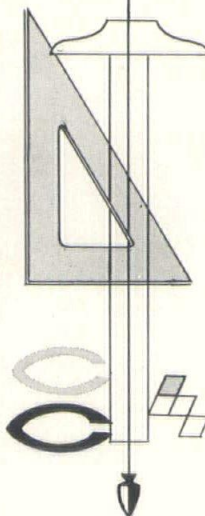


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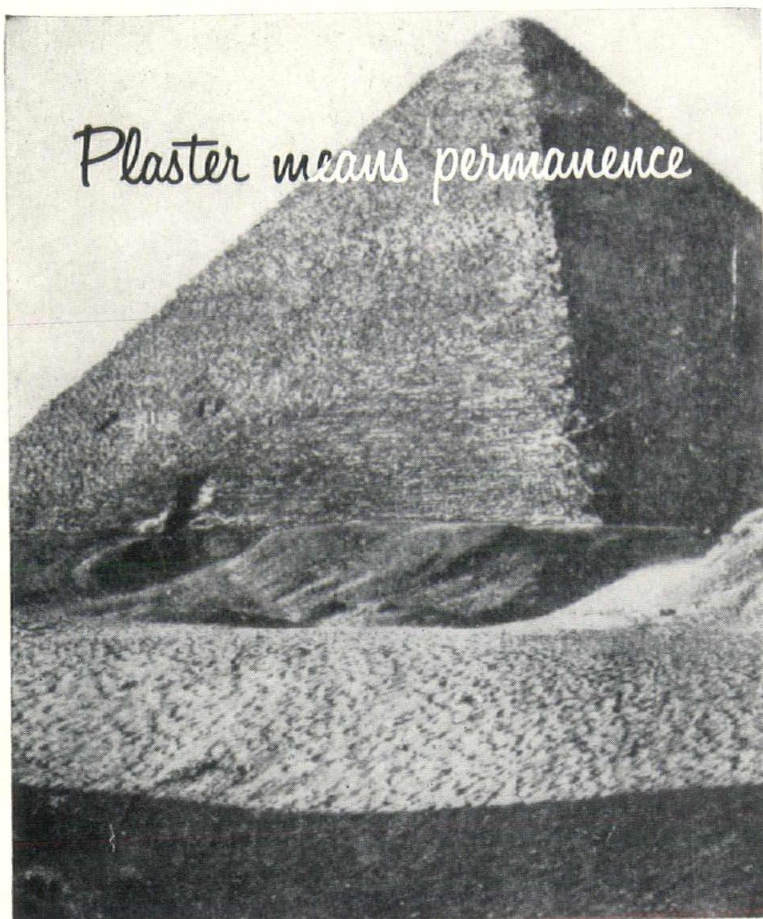


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BORN — Detroit, June 18, 1927

RESIDES — 102 W. Willow Road,  
Milwaukee

FIRM — Schweitzer-Slater Associates,  
Milwaukee

DEGREE — B. of Arch. and M. Arch.  
University of Michigan

Joined the Wisconsin Chapter, A.I.A. as  
a Junior Associate in 1954 and advanced  
to Associate in 1957.

#### ERIC FRIIS

BORN — Copenhagen, Denmark,  
November 25, 1916

RESIDES — RFD 2, Eagle River

FIRM — Eric Friis, Architect, Eagle  
River

DEGREE — Architectural School of the  
Royal Academy of Arts, Copenhagen.

Transferred from the Chicago Chapter,  
A.I.A.

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#### ALLEN F. GROOSE

BORN — Milwaukee, April 10, 1922

RESIDES — W140 N8112 Lilly Road,  
Menomonee Falls

FIRM — Robert W. Kemp, Architect,  
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DEGREE — B.S. University of Wisconsin

### JUNIOR ASSOCIATE MEMBER:

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RESIDES — 307 W. Marquette St.,

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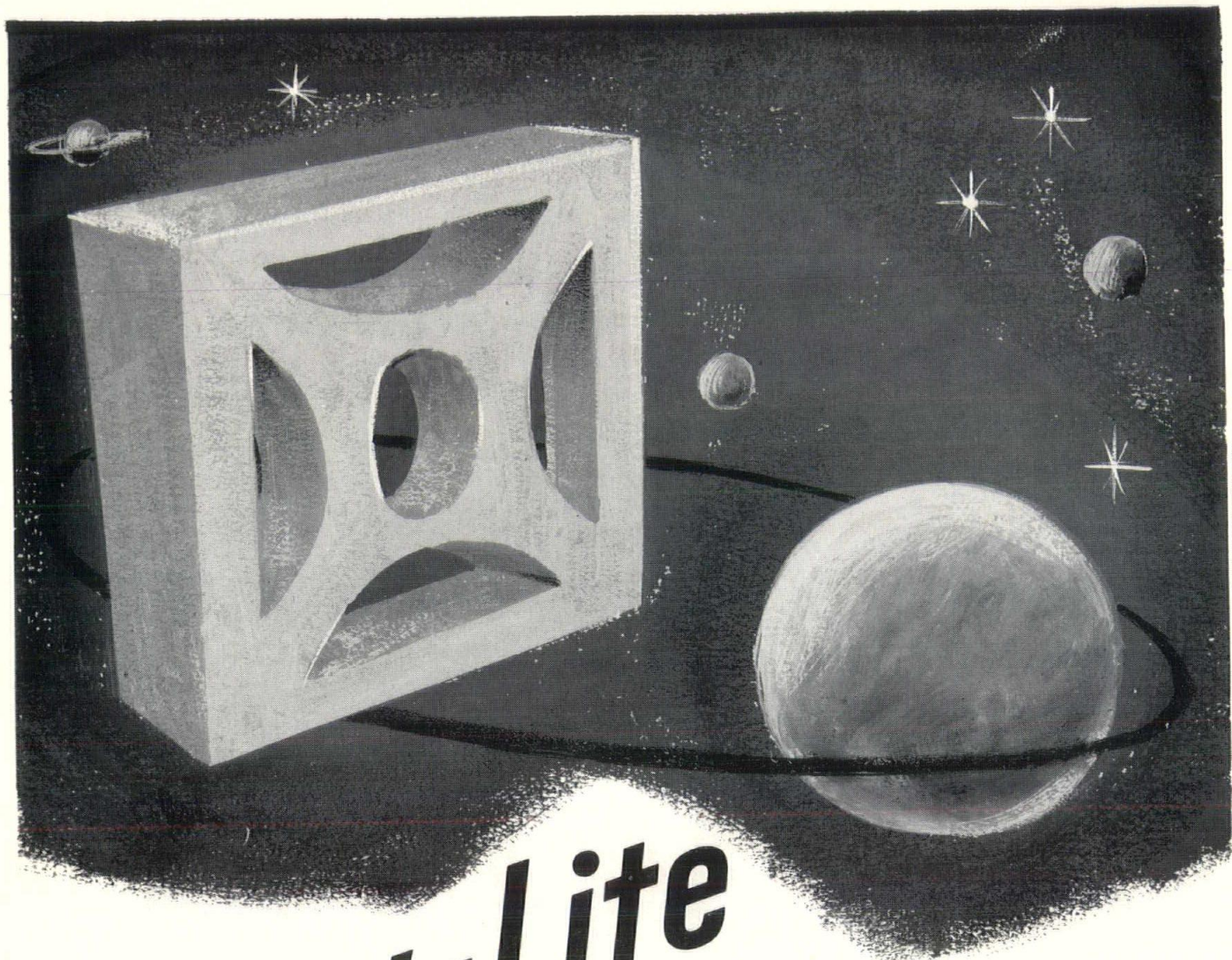
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Ceramic tile, a thin slab or shaped piece of baked clay, has played a notable part in man's life ever since recorded history.

The Babylonians used tablet-size pieces of baked clay to keep records on. So did Nebuchadnezzar's father-in-law, jotting down his tax collections on them. It remained, however, for Zoser, in the process of building a pyramid, to demonstrate how ceramic tile resisted the ravages of time. When discovered, five thousand years later, the crypt of this Pharaoh had walls lined with squares of baked clay depicting his exploits. The tile was like new.

The Persians further perfected the craft. They made tile in warm, vibrant colors serving to decorate their mosques. The Greeks, placing small, colorful pieces of tile so as to form an interesting pattern, calling it *mouseos* or "of the Muses," decorated floors, columns, fountains and even furniture with mosaic insets.

The early Spaniards responded to the

colorful squares of baked clay using them to add lasting beauty to their haciendas. They roofed their houses, paved their courtyards and patios with them, a custom still popular today in California, Texas, Florida and other southern states.

The manufacture of ceramic tile began in earnest around 1100 A.D. Being handmade, tile was too expensive for anything but the palaces and cathedrals of Europe.

As time went on, however, the craft improved and certain cities like Delft, in Holland, learned how to produce tile in quantities. The white, glazed tile made there featured handpainted landscapes and figures, and was popular the world over including the American colonies where it served as a fireplace ornament.

Finally in 1876, after several half-hearted attempts, tilemaking became a going industry on this side of the Atlantic.

Since then revolutionary developments have taken place and today the word tile encompasses an array of materials sharing only the shape (a thin slab or shaped piece) with the ancient meaning of the word.

Among the multitudes of materials generally described as "tile" the ever old, ever new ceramic tile has come a long way from the early days. For that mat-

ter, a long way from a dozen or so years ago when its main appeal was cleanliness.

The ceramic tile industry is growing faster than the construction industry as a whole and may experience a 70 per cent increase in production in the next dozen years, according to William M. North, president of the Tile Council of America.

Four major reasons for tile's resurgence are: Expanded design possibilities through introduction of new sizes, shapes and colors. Expanded uses for tile in building exteriors. New installation methods and procedures and new adhesives which have reduced installation costs and give better finished jobs.

Exterior applications are some of the fastest growing uses of domestic ceramic tile. Color and design possibilities are just two of tile's attributes; others are extremely long life, practically no maintenance, ease of cleaning, fadeproof colors and frostproof surfaces. Architectural ingenuity expresses itself in tile throughout the United States and it puts back the *mouseos* in tile use. Quite a compliment as the Muses in Greek mythology were the nine goddesses in charge of all the arts.



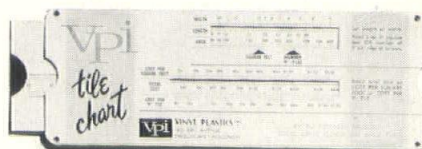
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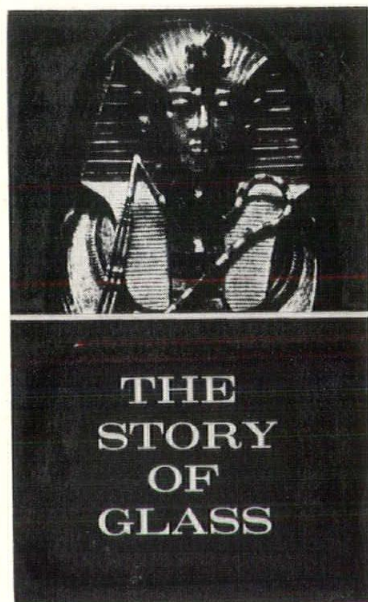
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So far as we know, manufactured glass made its first appearance in the ancient world in Egypt where beads have been found in tombs dating from the fourth millenium B.C. Some authorities consider that the Egyptians did not blow glass prior to 1400 B.C., or thereabouts, and that such blown glass as they may have had before that time came by way of trade, probably with Syria; others ascribe the use of the blow-pipe and glass blowing to the Phoenicians. Glass was an article of considerable commerce well before the beginning of the Christian era. For more than a thousand years, glass had been made at Thebes; at Alexandria glass-making had become an industry important enough to impress Emperor Augustus, 26 B.C., with its commercial value.



He decreed that glass thenceforth should be part of the Egyptian tribute in kind paid to Rome.

The Romans were quick to recognize the uses and desirability of glass and began to manufacture it, according to Pliny, in 14 A.D. Soon, the Roman products equalled those of Egypt. Besides making vases, bottles, drinking vessels, toilet articles and other items of luxury and decorations, the Romans promptly saw the usefulness of glass for glazing windows.

Glazed windows appeared early in the imperial period. Fragments of glass in a bronze frame were found in Pompeii. Fragments of glazing also have been found in Roman villas in England. It is assumed that the great windows in the Roman baths must have been glazed in some way to keep in the heat. It is supposed that these large clerestory openings were fitted with bronze frames, each frame subdivided into small compartments filled with glass. We also know that the Romans had conservatories and hothouses for their many exotic plants as early as the first century. Glassmaking was established in the provinces of Rome, Gaul, Spain, Portugal, along the Rhine and even in Britain.

Almost all the important technical processes in the making and decorations of glass were thoroughly understood in ancient times. The early Roman and provincial glassmakers knew how to blow "free hand," blow into moulds, work with the viscous glass while it was still hot and plastic with tongs and other tools, and make windowpanes, imitation pre-

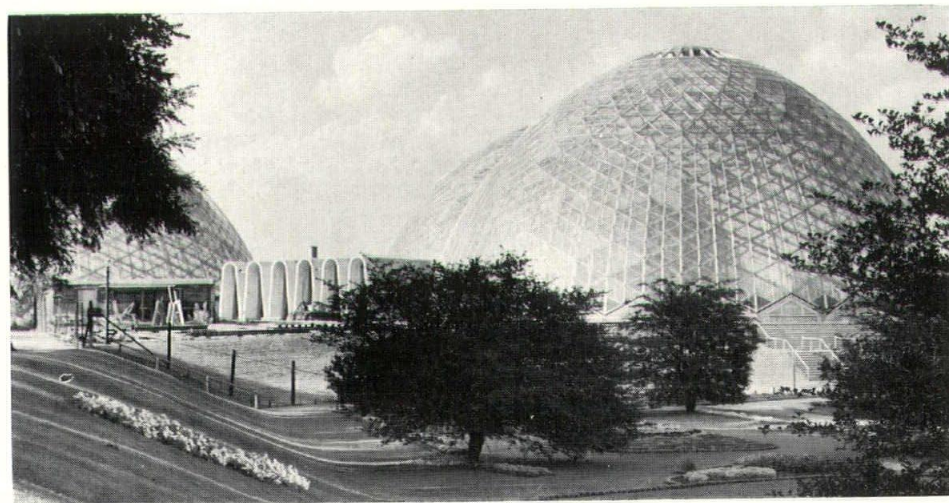
cious stones and cameos. From the second to the fourth century, glass of fine quality was made at Cologne and at other places in the Rhineland, and the remaining products from these old glass factories prove how highly developed was the art.

It was not until the Renaissance began to dawn that glass appeared at all commonly in the windows of domestic buildings. From the beginning of the Renaissance, contemporary architecture testifies to the rapid use of glass.

Glassmaking came to America with the first colonists and persisted through the formative period of the United States with little change. It was about the beginning of the 20th century that the machine age came into glassmaking.

Discovery of natural gas in the middle west, railroad development, growth of markets and the invention of machine methods to supplant the hand processes which had been in effect from the early Egyptian glass industry, all contributed to the American glass industry. First American plate glass of commercial quality was made by Capt. John B. Ford at New Albany, Indiana, about 1870. The first continuously drawn window glass was made on the Coulburn machine perfected by Libbey-Owens in its plant at Charleston, W. Va. in 1916.

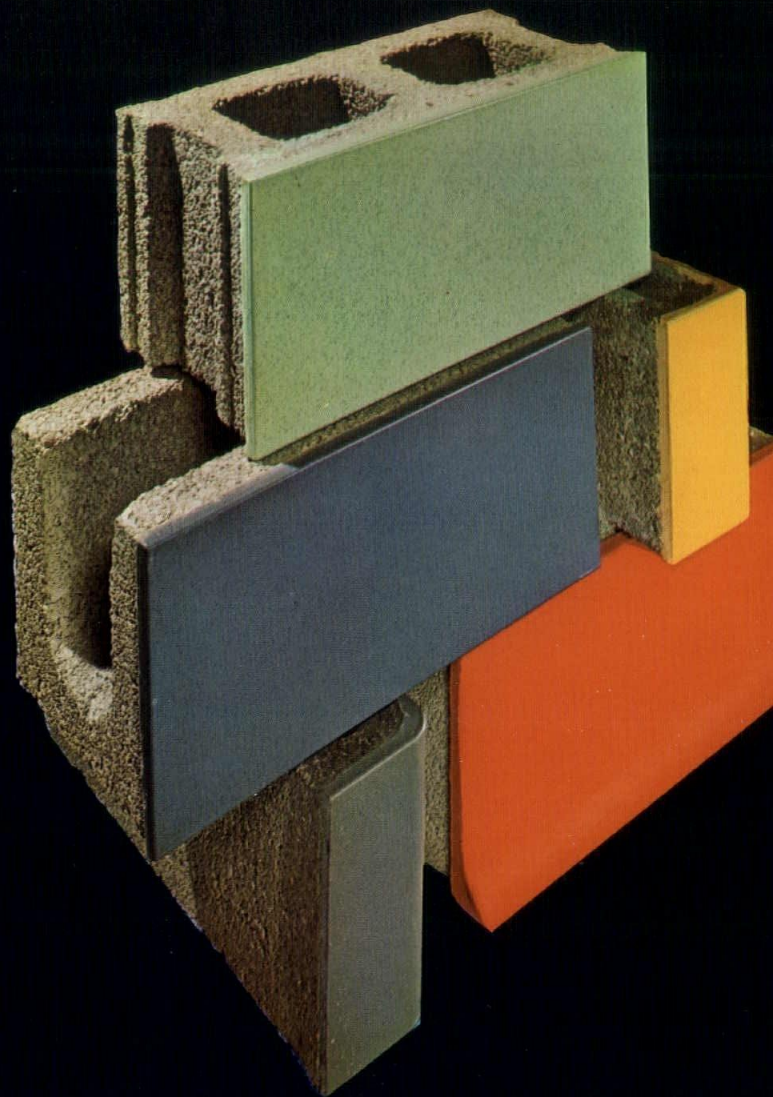
Despite earlier difficulties, ever since this time, the glass industry in America leads the world in pioneering new and vital uses of glass in almost all branches of science and industry. It also leads the world not only in quality but quantity produced.



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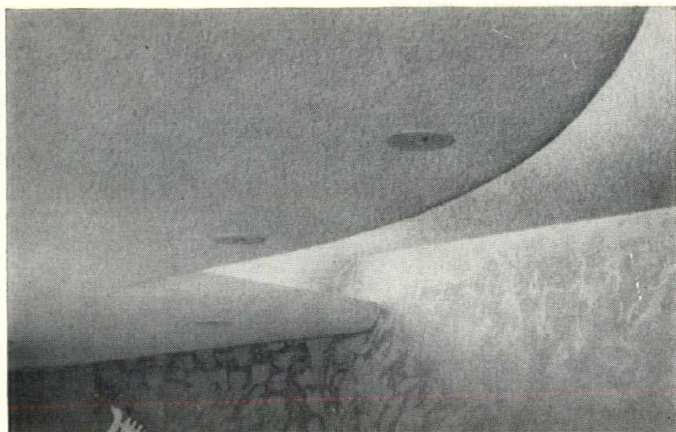
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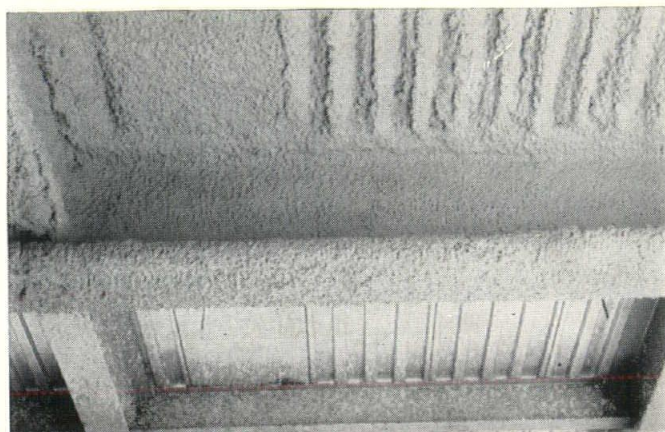
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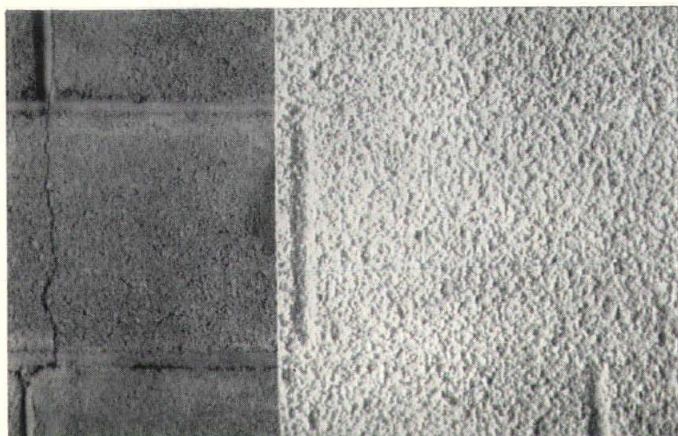
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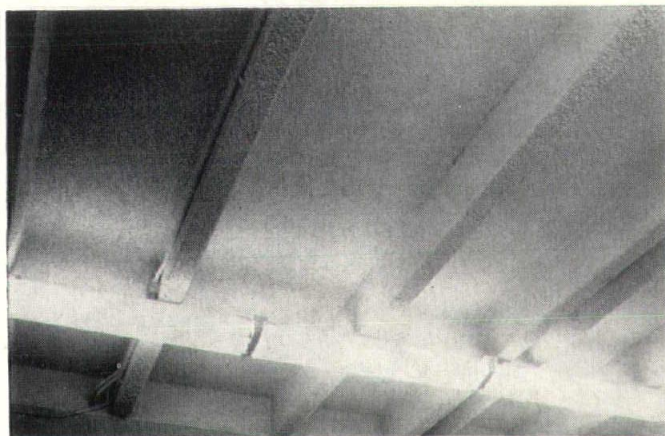
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