



# THE WISCONSIN ARCHITECT

THE OFFICIAL PUBLICATION OF THE STATE ASSOCIATION OF WISCONSIN  
ARCHITECTS — THE WISCONSIN CHAPTER A.I.A. AND THE PRODUCERS  
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## CONTENTS

### The Octagon and the Architect

### Problems of Passive Defense

By Rear Admiral William S. Parsons, U.S.N.

### Color Phenomena

### Keystone of New Pittsburgh Building Code

THE AMERICAN INSTITUTE  
OF ARCHITECTS  
MAY 3 9 15 AM '49  
THE DEPARTMENT OF  
EDUCATION AND RESEARCH



## THE WISCONSIN ARCHITECT

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LEIGH HUNT, F.A.I.A., *Editor and Publisher*

ELIZABETH SCOTT HUNT, *Managing Editor*

3800 N. Humboldt Ave., Milwaukee 12 EDgewood 2-2113

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## THE OCTAGON AND THE ARCHITECT THE PAST AND FUTURE OF THE A.I.A.

### INTRODUCTION:

The American Institute of Architects stands on the threshold of a new era in its activity of service to the architects of the nation. It has reorganized its internal setup so that the functions are carried on simultaneously by three principal departments: Administration, Education and Research, and Public and Professional Relations.

Adoption of structure revision set up these basic objectives, and restating them at this time seems to be in order:

"General — The A.I.A. should so organize as to furnish adequate, inspiring leadership and service to the public, to the profession and to professional education through the development of long-range objectives so 'That the Architect may occupy himself with every phase of life in the civilization of which he is a part and may improve the physical framework of our living.'

Specifically for accomplishment, the long-range objectives should embrace:

- a. A thoroughly Unified Profession.
- b. Education for the Profession (Practicing Architects).
1. To have greater vision; to aid in public endeavors and to participate in the affairs of their respective communities; to think in terms of public welfare as a part of their own.
2. To think in broader terms of community development; i.e., land use, city planning, zoning, health, safety, etc., rather than for specific buildings coming from their offices.
3. To become more vitally interested in all matters relating to the improvement of physical planning.
4. To encourage and aid the younger members of the profession and to think in terms of the welfare of the profession.
5. To be willing to contribute to, and aid one another and the profession, in the development of better means and methods.
6. To be scrupulously ethical. Clarification of

ethical standards by example. Continuous education in ethics necessary.

7. To instill in the Chapters the will to take the initiative in all such matters so that, within the framework furnished by The Institute, each may formulate and carry on its own program and activity in a vital way.

8. To aid the practitioner to render an improved and adequate service to clients.

9. The development of Architecture as a living science and art.

- c. Adequate professional training (students) more closely allied to and functioning with the Profession.
- d. Adequate research, study and co-relation of data.
- e. Adequate and proper Public Relations — Governmental and otherwise, including adequate dissemination of information on architectural practice and problems affecting the profession.
- f. Adequate professional relations, contact and information dissemination.
- g. Journalism with vitality to develop progress within the profession should be undertaken.
- h. Properly organized and staffed Octagon to so conduct affairs that the Basic Objectives may be attained."

The Officers, Committees and Staff, by word, deed and action, have been vigorously promoting these aims with particular reference to:

1. Building up the prestige and dignity of The Institute;
2. Raising the level of the Architectural Profession;
3. Being of greater service to society.

The Institute's influence is felt in all levels of the national government, particularly the Executive and Legislative, and it is looked upon with respect by those who are responsible for new trends and developments in the construction and designing fields.

The architect has not risen in favor with legislators and building authorities as a matter of chance. His good name has been promoted on a year 'round basis through an intensive program of education and public relations directed from the Octagon; his professional standards have been kept high through the work of outstanding committees and high caliber staff members who use every opportunity to promote "the practical efficiency of the profession."

### WHERE DO WE STAND NOW?

The A.I.A. comprises approximately 8,000 members or 75 per cent of the profession and is therefore able to speak for the architectural profession in America, which it does frequently and to good effect. We face immediate problems of the necessity of expansion in two directions at present: Education and Research, and Public and Professional Relations. Let us look at some of the plans for the immediate future but, in so doing, it must be borne in mind that these expansions of influence and activity will cost money. More money than we now have in our annual budget for such purposes. These are all activities which the architects have themselves requested and on the floor at the 1948 Convention in Salt Lake City a com-



mittee was authorized to give thought to ways and means of increasing the dues of each corporate member of The Institute. You will be given definite proposals for such increase at the 81st annual Convention to be held in Houston, Texas, in March. This is why such an increase is now imperative and these are the things The A.I.A. hopes to accomplish in the immediate future if sufficient funds are forthcoming.

### EDUCATION AND RESEARCH

The Institute recognizes that the practice of architecture today calls for a wealth of technical education and the experience in specialized building types that must be brought up to date on a constant, year 'round basis. The Board of Directors recognizes that the work of this department, under the capable and vigorous administration of Walter A. Taylor, who has performed such a splendid job in laying the groundwork, is among the No. 1 jobs of The A.I.A.

All activities of this Department are aimed toward one goal: elevating the status of the practicing architect by attempting to improve education at the architectural school level, analyzing and interpreting the latest advances, and providing for the greatest degree of participation possible in seminars on the social, physiological and psychological factors of design along with a consideration of structural theory, building materials and equipment, and construction techniques.

The A.I.A. performs these services in many ways including committee work, special articles in the *Bulletin* and individual publications, staff studies of building types, research by faculty members and graduate students in cooperation with The Institute, collaboration with other societies, and the seminars.

The seminars are becoming of increasing importance and an ambitious program is scheduled for 1949 at three levels:

1. *National Convention.* This will be under the general heading of "American Life and Architecture in the Atomic Age" and will be concerned not only with talks by nationally prominent authorities on atomic science for peace and war, but also with larger fundamentals of trends in American life and fundamentals of design with emphasis on color systems and specifications. Thus, each annual convention will be concerned with broad, theoretical and inspirational treatments of subjects of common interest to the architects.
2. *Regional Seminars.* These will be staged for each of the eight regions of The A.I.A. and will be concerned with somewhat more specific problems of practice such as architectural building types. This should enable hundreds of members who cannot now find it possible to attend the annual convention to be brought up to date on the latest ideas in construction. The emphasis will be on individual participation rather than formal lectures.
3. *State and Chapter Seminars.* The A.I.A. wishes to give impetus also to an expansion of the seminar idea at a state and chapter level where architects can gather for detailed discussion of technical and mechanical problems, speci-

fications and materials. Such matters as office practices can also be considered.

If an increase of dues is achieved, then the Department of Education and Research can embark successfully on all of the items enumerated above, as well as the following:

#### 1. *Refresher Courses for the Practitioners.*

This program, over a period of a few years, could include the following fields with respect to new developments and changes in theory and practice which have come about since the period of formal education of the practitioner in school: technical advances in the building industry, evolution in architectural theory and character, techniques or subject matter new in the schools, broadened scope of architectural service, and the effects on professional practice and ethics.

This program would be divided into professional practice, design, history and theory, structural theory, new construction techniques, new materials and mechanical equipment. By Board direction, the emphasis in the immediate future is going to be on professional practice and mechanical equipment.

The materials, it is hoped, will be assembled into Chapter handbooks which can be brought up to date as information changes. The Department of Education and Research would prepare manuals for different subjects to be discussed at seminars on the various levels, and would recommend textbooks, bibliographies and resources drawn from the profession, industry and technical sources.

#### 2. *Expanded Clinical and Consulting Services to the Profession Regarding Technical and Specification Problems.*

This would make The Octagon the headquarters for information on difficult and unusual problems and would constitute a direct service to the practicing architect. Such a service is now available, although not being utilized extensively — but it is planned to publicize this service and urge Chapter officials to encourage submission of problems and requests for technical assistance.

#### 3. *A More Complete and Critical Review of Technical Literature.*

This review and analysis would cover published books and research reports issued by government agencies and other sources. This is more than just reporting the availability of such information: it is a critique in the light of architectural practice.

In order to perform such services, staff facilities will have to be expanded so additional competent personnel can be engaged to accomplish these tasks. An example of the kind of job that can be done if sufficient funds are available is indicated in the RESEARCH aspects of the Department. The A.I.A. should help to provide guidance for some of the millions of dollars now spent by industry investigating construction materials. This can be implemented



through the Building Research Advisory Board and the affiliation of The A.I.A. with The Producers' Council. The work being done in modular coordination is a classic example of the kinds of programs which can be furthered successfully with The American Institute of Architects leading the way and pointing out the desirable paths for scientific analysis.

#### 4. The National Honor Awards.

The A.I.A. has taken another bold step forward to encourage the appreciation of excellence in architecture. Every member has received an announcement of the First Annual Program of National Honor Awards which will take place in conjunction with the 81st convention in Houston. It will include two classes of buildings: residences and schools designed and completed since January 1, 1945. Thereafter such a competition will be held on an annual basis in a series of building classes.

Some slight indication of the scope of the committee activities of the Department of Education and Research, in addition to the work previously described, is shown in a brief enumeration of some of the more important ones.

The Building Codes Committee with advisory members in most of the States is concentrating its efforts upon simplification of the legal procedures in an effort to separate administrative machinery from technical content of codes, advocating boards of standards and boards of appeals to permit continuous revision of codes in accordance with technological advances. This is one of the more active committees.

The Committee on School Buildings of The A.I.A., at its first meeting in Chicago, November 15, 1948, established as its theme, "How Can Architects Help in the Planning of Better Schools?" Four methods of procedure were adopted and assigned to specific members of the Committee, as follows: broadened scope of services; cooperation between The A.I.A. with established governmental and private agencies regarding planning standards; coordination and evaluation of published material on equipment; study of the public relations and interchange of information, including other countries.

Other committees which are receiving national attention are those on Atomic Age Architecture, Local Public Buildings and the Committee on Education. This latter body appraises the objectives of architectural education, including reference to accrediting and registration, but has no desire to attempt to regiment the schools and educators as regards their curriculum; it considers the education of the architect as a lifelong process.

#### PROFESSIONAL RELATIONS

The general tenor and trend of professional relations — the relationship of The American Institute of Architects to government agencies, the Congress, and other national construction groups which have headquarters in Washington — is the reaffirmation that the practice of architecture belongs in the hands of the private architect and not in the hands of a government bureau or agency.

The sad experience of the Veterans Administration

and its hospital building program is a case in point — a situation where a government agency is attempting to take over from the architect the design of hospital structures. The A.I.A. has declared a fight to the finish in this instance, a bold and vigorous fight under the direction of men like Edmund R. Purves, our new Executive Director, and John R. Fugard, Chairman of the Advisory Committee on Veterans Hospitals, and we think our efforts will be crowned with success.

The best statement of how the A.I.A. is attempting to present the case of the private practitioner to government is contained in the brief which has been sent to Ex-President Hoover's Commission on Organization of the Executive Branch of the Government. We quote briefly from this report, as follows:

"In order that the Administrative functions of the Federal Government may be carried out in a manner consistent with the aims and traditions of the people of the United States, we request the adoption of a definite policy with respect to the rendering of professional service for public works. The policy we advocate calls for the utilization of professional and technical people drawn from private practice to render professional and technical services on public works. Private endeavor must be utilized to the greatest extent, and on the customary basis for the rendering of such service. That is — by a contract between the Government and the professional."

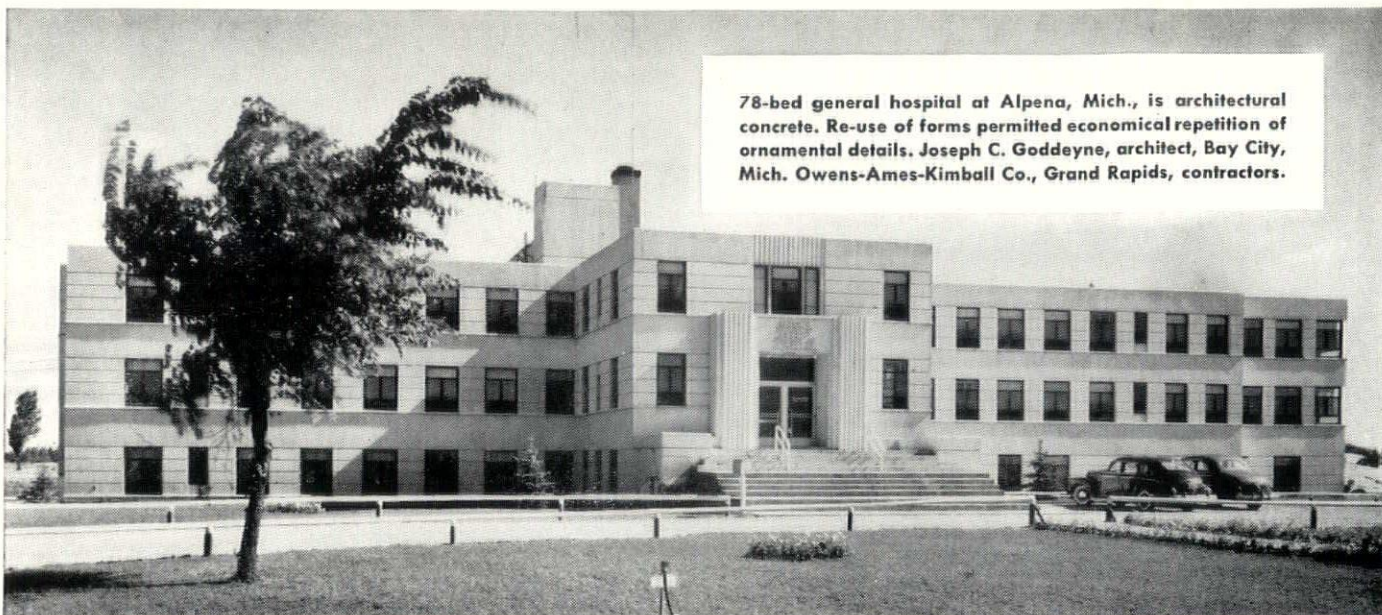
The statement goes on to say that the Federal Government has in general increased its personnel to an alarming degree over a period of years and The A.I.A. is concerned with the field of architectural service in particular. There is one very important phrase in this brief, which reflects the attitude of those in The Octagon to a marked degree. It is: "We are not concerned with personalities or with partisan politics. We realize that the ambitions which are inherent in the bureaucratic mind manifest themselves without regard to political faith. Our request for the utilization of architects in private practice is based on fairness and justice."

The false arguments that architectural service may be obtained at less cost from a Government Bureau are exploded by the brief which says: "In support of the bureaucratic contention, costs data are offered to the Congress and to the public which ignore all costs but those of wage and material. All reference to overhead, maintenance and overmanning of Bureaus is avoided. The fact that Government Bureaus must maintain their personnel, regardless of the workload thrown upon the Bureaus, is ignored."

The A.I.A. does not call for the total abolition of the Bureaus that they restrict themselves to their proper role of acting as the taxpayer's agent in engaging private enterprise, in establishing the criteria and programs for that engagement, and in supervising the expenditures of the taxpayer's money.

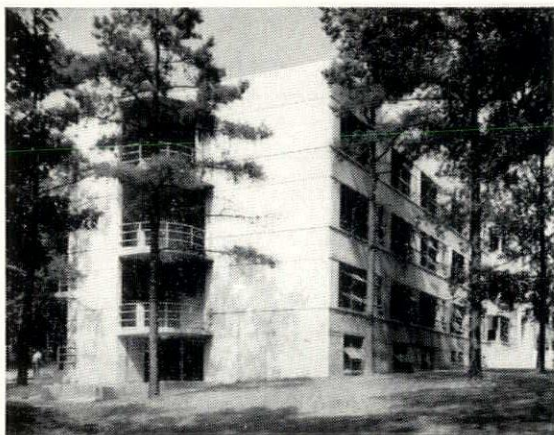
One suggestion — and a very important one it is — is that in the reorganization of the administrative arm of the Government, favorable consideration should be given to the establishment of one administrative agency, which would include within its single





78-bed general hospital at Alpena, Mich., is architectural concrete. Re-use of forms permitted economical repetition of ornamental details. Joseph C. Goddeyne, architect, Bay City, Mich. Owens-Ames-Kimball Co., Grand Rapids, contractors.

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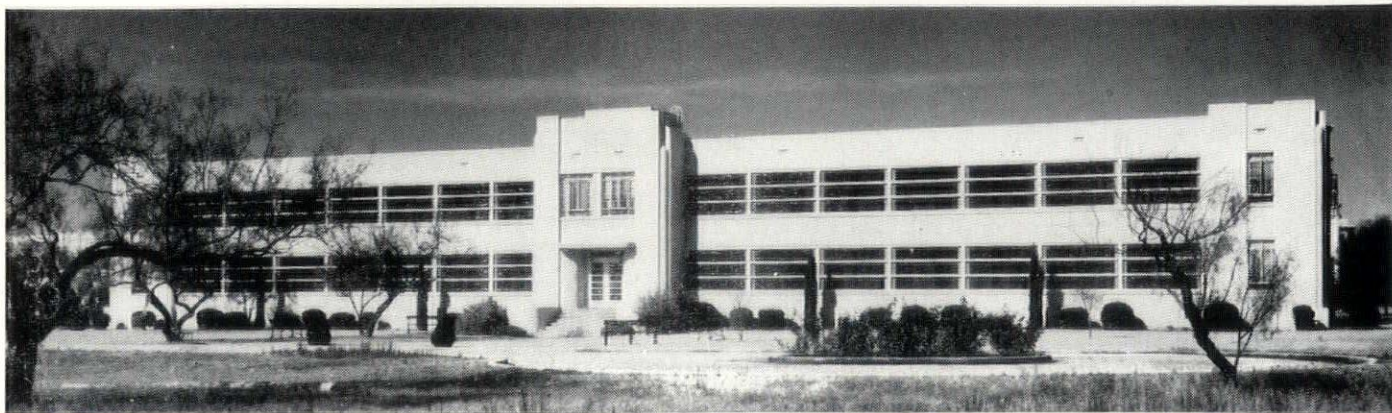
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authority all Federal Government construction programs.

The situation cited above is given at such length because it shows how Ned Purves and the committee working with the Department of Public and Professional Relations are on the firing line battling to advance the cause of the practitioner. This means appearances before Congressional committees and the preparation of statements for those hearings; the publication in the nation's press of the policies of the architects so that a broad base of support can be obtained for them; and innumerable meetings with government agency heads to advance our policies in the firmest manner possible.

There is the very active Committee on Fees under the chairmanship of Clarence B. Litchfield, of New York City, which for the first time has made a nationwide study of fees charged for various types of construction, the relationship of the architect to engineers and the services which should be included in a standard contract. The committee has been in operation for several years and its work will be of increasing importance now that President Truman has announced a large program of housing development. The relationship of the architect to government public works and construction programs will be affected to a large measure by the work of this committee.

Louis Justement's Committee on Federal Income Tax Legislation is trying to make it possible for architects to spread income tax payments over several years. The Committee expects to have a bill ready for the current session of Congress (the 81st) which will incorporate the so-called "Silverston" idea of tax relief. The A.I.A. thus adds its voice to similar actions by such professional societies as those in law, medicine, dentistry and civil engineering.

There is the Committee on Housing Criteria which, in cooperation with Federal officials lays emphasis upon the livability and architectural character of structures in contrast to minimum standards of area, dimension and construction. One of its corollary duties will be education of the public, builders and financial agencies in the facts of life, architecturally speaking.

This year, as was true during previous sessions of Congress, a Legislative Reference File will be kept by The A.I.A. at the Octagon on all bills affecting the architectural profession. These bills will be watched carefully, appropriate action will be taken where necessary, and information will be provided to those A.I.A. members who desire full details. Most architects don't realize that they can learn from the Octagon the latest information about proposed public buildings — such as post offices, hospitals, etc. — before a bill is even passed. This information enables architects to be considered for a project in plenty of time.

The work of the Department of Public and Professional Relations is best exemplified on the basis of some dramatic incidents in the relation of the architect to government. A few years ago, after a spirited fight on the floor of Congress, which was brought about by President Shreve and Mr. Purves, a Federal war housing program totaling about \$350,000,000 was given to private architects in the U.S.

At an average assumed fee rate of 2% (to be on the conservative side), this amounted to \$7,000,000 which the architects earned under circumstances that originally seemed to preclude such benefits by them. More recently, a \$750,000,000 veterans hospital program was made available for architectural services — this amounts to an assumed \$15,000,000 sum of fees which were earned by American architects. (The gross fees earned may be considerably in excess of these two figures.) What better demonstration is there of the value of an alert and progressive program of public and professional relations?

In addition to the work of the above committees, and because of the progressive attitude of The American Institute of Architects in such matters as modular coordination, low rental and moderate rental construction and building costs, legislators have come to look on the architect in America as an objective, honest and public-spirited citizen. Our voice carries the ring of authority and is regarded with respect by most of those who decide high policy in and out of government. This is a position which we cherish and shall strive to maintain at all costs.

#### PUBLIC RELATIONS

Another principal function of the Department of Public and Professional Relations — Public Relations — is expanding as of now at a rapid rate and is one of the most important activities of The American Institute of Architects. Public relations, stated simply, is the gaining and maintaining of a favorable public attitude toward architects and the practice of architecture.

The Board of Directors has approved general public relations policies, as drawn up with the aid of Public Relations Counsel, which will cause a tremendous expansion of activity in the next few months. The policy is twofold in nature: a broad attempt to educate the general public on the important role that the architect plays in American life and, simultaneously, to acquaint the architect with the services which The Institute provides for his benefit.

The policy asserts that if people are to employ architects they must first learn something of the way architects think, design and plan for better living and working conditions. If the practitioner in his office is to appreciate the vast operations of The A.I.A. in all its branches, he must be informed continuously and over a period of time about just what takes place at The Octagon, at committee meetings, conventions, and sessions of the Board of Directors.

Two things of major importance must be done during the coming months. The media used to reach the public must be expanded from newspaper releases to syndicated articles and magazine stories. The 8,000 architect members must be told clearly and distinctly just what the goals of The A.I.A. are and what measures are being undertaken to achieve these objectives.

Here are some of the steps — and they're expensive steps — which are being taken now in the public relations field:

1. Newspaper releases to newspapers throughout the nation, and particularly in those areas where it would be of the greatest benefit to the A.I.A. members, are being prepared and dis-



tributed on what amounts to a weekly basis from the Octagon. Public Relations Counsel comprises Richard C. Lee and Eugene H. Kone, two trained experts in public relations and newspaper work, who write all releases and whose work, as evidenced by clippings, is appreciated by the city desks of newspapers.

2. Photographs and mats of leading A.I.A. speakers are sent from The Octagon to communities in which they are appearing before Chapter or regional meetings along with advance announcements so as to aid local publicity and public information committees.
3. This year, as occurred at Salt Lake City, a Press Bureau will be in continuous operation for two weeks to handle The Board of Directors and Annual Convention meetings in Houston, Texas, in March. The A.I.A. received a very favorable press last year as a result of the efforts of this bureau which distributed texts of addresses, announcements of policy and articles on the election of Officers and Fellows. The bureau will be manned at the Rice Hotel in Houston by our Public Relations Counsel and staff members from The Octagon.
4. In addition to the seminar sessions at the Convention, regional seminars will be held during the year throughout the country. Public relations aid will be provided for these seminars from The Octagon.
5. Expansion of publicity will be made through

magazines of national circulation and through syndicated columns in the press.

6. Newsletters to the membership will be issued from time to time on urgent matters affecting Institute policy.
7. It is hoped that in the future there will be published a "Handbook of Public Relations for the Architect" which will attempt to convey how the individual practitioner can improve his relations with his clients and his stature in the community where he practices.
8. This year a "Handbook of Public Relations for A.I.A. Chapters" will be issued which will help each incoming President and Chairman of Public Relations to do a better job in publicizing activities at the Chapter level.
9. In addition, a publicity kit of typical news releases, radio scripts and other materials will be prepared which can be distributed to Chapters as a guide. This will supplement the handbook.

#### OTHER ACTIVITIES WHICH THE AMERICAN INSTITUTE OF ARCHITECTS PROVIDES

By maintaining joint committees with both the Associated General Contractors and The Producers' Council, The A.I.A. keeps in touch with latest developments at both the manufacturing and contracting levels, expresses the honest and objective opinion of the architectural profession on many issues and strives to promote such practices as modular coordination in an effort to lower building costs.

1915



\*22 KWH per mo.

1930



\*50 KWH per mo.

1945



\*116 KWH per mo.

\*Actual Average number of KWH used, per month, in Milwaukee homes.

1960



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At a governmental level, the action of The A.I.A. in promoting the Army Affiliation Program, establishing a committee on atomic age architecture and exploring cooperative activity with the National Security Resources Board has enabled The Institute to be ready for any national emergency which might arise.

At an international level, The A.I.A. has been active in providing cooperation to that branch of the United Nations known as UNESCO on several occasions. In addition, The A.I.A. delegation to the Constituent Assembly and First Congress of The Union Internationale Des Architectes at Lausanne, Switzerland, distinguished itself and Ralph Walker of New York City was elected a Vice President. Participation in Pan American Affairs has always been active and The A.I.A. has been asked to recommend themes to be discussed at a Pan American Congress of Architects in Havana, Cuba in December, 1949. Julian C. Levi, Chairman of the Committee on International Relations of The A.I.A., has made it possible for graduates of schools belonging to The American Association of Collegiate Schools of Architecture to take courses in architectural composition at the French Ecole des Beaux Arts without any examination — subject to approval by a Committee of American architects.

There are, of course, the well known functions of The A.I.A. which need no further elaboration: higher standards of ethics, better standards of architectural education, improved building codes, liability insurance for architects. The publication of "standard" documents is a great service in and of itself.

In the last analysis, The A.I.A. will be only as good as the impression left by each architect in his dealings with each client: in his knowledge of the

profession of architecture and his ability to design a structure which will reflect lasting credit on himself and his fellow practitioners. The American Institute of Architects can do much to offer a helping hand if its national activities are adequately financed and universally supported.

## PROBLEMS OF PASSIVE DEFENSE

By REAR ADMIRAL WILLIAM S. PARSONS, U.S.N.

(Remarks before A.I.A. Convention session "American Life and Architecture in the Atomic Age," Houston, Texas, March 15, 1949.)

The problems of city planning and design of structures for resistance to atomic bombing might offhand seem to bear little resemblance to the prob-

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lems of ship design. But I feel that one of the general conclusions from the Bikini tests has application to national planning, city planning and structural design.

This general conclusion was that changes in ship design to give increased resistance to atomic blast and radiation should not be such as to handicap the ship in performing its primary function.

To illustrate the point: a destroyer needs to be light, fast and hard-hitting — above the surface, on the surface and below the surface. If, in order to make this ship resist atomic bombs at less than half a mile, it were loaded down with heavy shielding and its radar equipment were reduced to the point of loss of range and sharpness, then we would have bought a small increase in security at a great cost in operational value.

What we can do is to consider most carefully all of the effects of atomic bombs against ships and take these into account whenever a redesign is made. For example, most stacks and radar antennas suffer from all kinds of blast, including typhoons. It is quite reasonable to redesign these projecting elements to increase their ability to resist lashing from severe storms — and to stop at this point.

In connection with Bikini, you recall that those tests consisted of one air and one surface burst atomic bomb against an array of ships.

Damage ranged from sinking to superficial depending on the presentation and distance of the target ship.

An atomic air burst will render useless almost any feasible above-ground structure at distances out to about half a mile. Beyond this range structures which are designed to resist tornados, fires and earthquakes also begin to resist the blast, wind, heat and shock produced by an atomic bomb.

To give an idea of the magnitude and duration of the atomic blast which a building encounters in the outer zone of severe damage, it is estimated that at 2000 yards from a twenty-thousand-ton bomb the peak pressure would be 4 p.s.i. and the positive pressure pulse would last .85 sec. The wind which accompanies this blast may reach 140 m.p.h. for a brief instant.

In my opinion the sound approach to city and structure design is to continue to emphasize *primary function* and to add atomic blast and radiation flash to the list of natural and man-made catastrophes which may at some time be encountered.

Obviously, enunciation of a general principle does not solve specific problems of location and design of structures. These specific problems can only be examined within the setting and framework of the geography, transportation and many other controlling factors. In each case, if we look ahead five or ten years, we must consider the *possibility* of encountering atomic blast. This possibility may for some places be so small that it can be neglected — in other cases it may be greater than the hazard from a hurricane or earthquake. In any event it should be taken into account, if only to dismiss it.

I believe that partly because atomic secrecy has thrown a smokescreen of mystery around atomic energy, those outside of this American "iron curtain" have credited the insiders with profound and exten-

sive knowledge. If there is such a person as an Atomic Oracle, I, for one, have never met him and I would suspect him if I did. The point of these assertions is that there is an upper limit to what "Washington" can give in the line of "know how" in this complicated field.

The effects of atomic bomb explosions against different types of structure have been carefully studied since Hiroshima. In late January and early February, 1949, a group of highly qualified individuals gathered at the Los Alamos Scientific Laboratory to prepare a handbook of effects of atomic weapons. I have seen preliminary drafts of most of the chapters, and I feel that this handbook will make much-needed basic information available. Several chapters will provide engineering design criteria and analyses comparable to those used to design against fires, hurricanes and earthquakes. In my opinion, this handbook will be an important contribution to civil defense and is an example of the kind of know how that central agencies can provide. Given this information designers have the choice of deriving their own criteria or using some form of comparison of atomic blast and shock with more conventional catastrophes.

As I implied earlier, an attempt to provide complete (necessarily underground) protection against atomic attack at close range would cost so much and would interfere so greatly with what we have come to regard as normal living that it is unacceptable. The only alternative is to accept a "calculated risk" the military euphemism for taking a chance. There is nothing unusual about such a compromise with fate. We make these decisions each time we ride in a taxicab or go skating or skiing.

The practical question faced by a city planner or building designer is "What can be done with what is available?" Absolute safety has never existed this side of the grave.

Based on the European and Japanese experience with bombing, it seems essential to provide warning systems and shelters against bomb blast and atomic radiation. The U. S. Strategic Bombing Survey concluded that had warning been heeded at Hiroshima and Nagasaki even the primitive shelters there would have been effective in saving life. In this connection I quote a paragraph from the Survey report on "The Effects of Atomic Bombs on Hiroshima and Nagasaki" dated 30 June 1946:

"The most instructive fact at Nagasaki was the survival, even when near ground zero, of the few hundred people who were properly placed in the tunnel shelters. Carefully built shelters, though unoccupied, stood up well in both cities. Without question, shelters can protect those who get to them against anything but a direct hit. Adequate warning will assure that a maximum number get to shelters."

As a general program, *trends* should be examined in the light of available information. From this examination, acceleration of some trends and changes in others will be in order. For example, traffic congestion caused by heavy concentration of workers in parts of large cities is undesirable from several points of view, particularly atomic defense. Other problems of city planning and choice of criteria for structural



design are finally solvable only by those who have extensive knowledge and responsibility.

The emphasis on need for local thinking is intended to bring home the fact that modern war, even of the pre-atomic variety involves the civilian population as never before. The civilian pays the bill for all defense, then in case war comes he may find his cities part of the combat zone, and finally when the war is over he pays for repair of the damage. These facts alone should offset any tendency to feel that all the necessary thinking and planning can be done by some far distant group of military and atomic experts, with the conclusions and decisions handed out to each city and region on a "push button" basis.

I would sum up by saying that to me the most important element of atomic and other defense is our attitude toward it. We would be self-defeated if we saturated our energies and our economy in a hysterical effort to buy absolute safety. On the other hand, we should make every effort to add atomic facts of life — subtle and obvious, pleasant and unpleasant — to our folklore. As this process proceeds, we will be increasingly able to apply common instead of uncommon sense to the problems, and in this measure the overall solutions will be sound.

### COLOR PHENOMENA

A lecture-demonstration of basic principles  
in color perception

By ISAY A. BALINKIN

(Before A.I.A. Convention Seminar session, "Fundamentals of Design-Color," Houston, Texas, March 15, 1949.)

The recent advances in the field of colorimetry are based upon a clear understanding that there are three basic factors which determine color perception.

The purpose of the lecture is to present in a simple and popular language the fundamental facts of color. About twenty different experiments and demonstrations are used to show the effect of these factors upon the color perception. Thus, the emphasis is placed upon the physical apparatus to make it clear that the color appearance of a surface is controlled by the type of the light source, the reflecting characteristics of the substance, and the perception evoked in the observer.

The numerical specification of a color by a set of three numbers is based upon the measured or standardized values of the spectral energy distribution in the light source, the spectral reflectance of the sample and the visual response of the normal observer.

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## KEYSTONE OF NEW PITTSBURGH BUILDING CODE

By HARVEY A. SCHWAB

The writing of a Building Code is a highly coordinated effort on the part of many people, all working in individual compartments toward a common goal. It is not unusual in such a cooperative effort and long drawn out process, for an obvious idea to be at first overlooked. Such was the case in the matter of Occupancy.

In existing codes this all important subject is scattered throughout the many subdivisions as a sort of unexpressed factor affecting various rules and regulations without being the major criterion in determining risk and danger involved in the use of structures. No consideration was given the measure of risk involved in Mixed Occupancy, nor of the potential danger of the change in character of occupancy of an existing building even though no major alterations were involved.

Since, legally, building codes can only be valid in the case of new construction or where a major alteration is undertaken, Occupancy Permits appeared to be the only solution to this problem. These are not retroactive in any sense, but they do require compliance with reasonable standards of safety consistent with the change in occupancy.

After considerable thought, the Subcommittee on Occupancy, with mixed feeling of boldness and temerity, proposed that Occupancy be made the keystone of the entire new code. They then submitted an outline of all types of occupancies under five major and two minor headings, together with tentative definitions of each, and two tables covering allowable height, constructed type and "occupancy separation" limitations.

It became evident immediately that if this were adopted as a policy of procedure, most of the considerable work that had been done would have to be rewritten, or at least rearranged, which in turn might delay considerably the completion of the code for submission to City Council. A somewhat stormy session of the General Committee took place which approved in principle the idea, subject to approval of Mayor Lawrence. This approval was promptly forthcoming.

Real work then began on the "new approach" which was not really a new approach at all, but one which had at first been overlooked. Very soon it was evident that it would be impractical to minutely define all possible occupancies. This forced definitions into broad and general terms, made sufficiently clear by example as to the intent to make possible interpretations by the Board of Standards and Appeals.

In the interest of brevity and convenience most of the restrictions were condensed into Tables 5-A and 5-B, which covered separations required between Mixed Occupancies and the height and structural types allowable for each type of occupancy.

CONTINUED IN APRIL ISSUE

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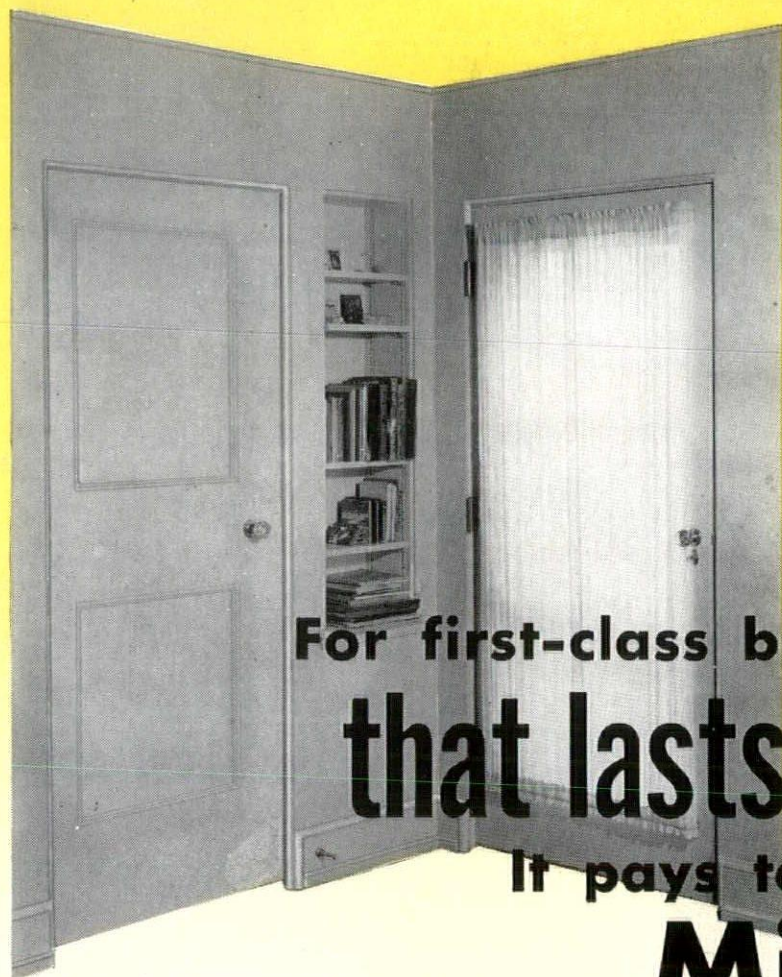
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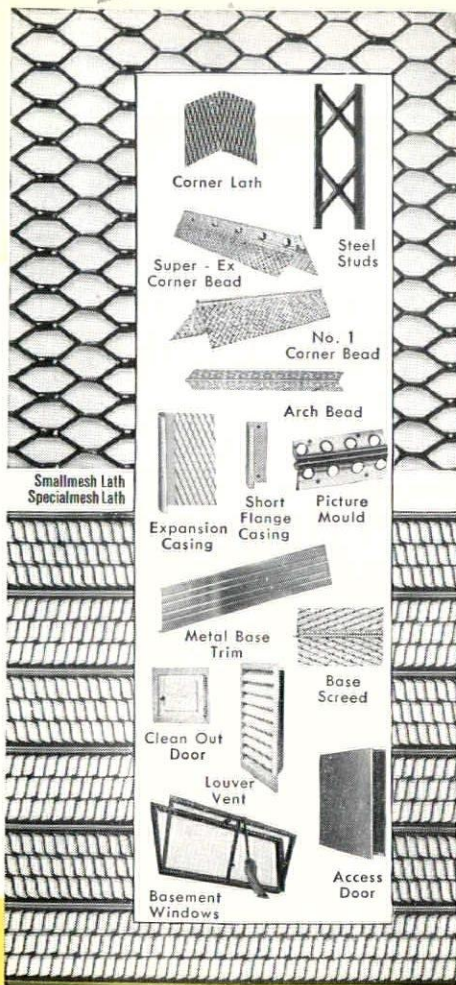
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