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Southern Architect is the official publication of the North Carolina Chapter of the American Institute of Architects and is published monthly by H. J. Stockard, Jr., 133 Fayetteville St., Raleigh, North Carolina, Telephone Temple 4-4384. Address all communications to Southern Architect, Post Office Box 408, Raleigh, North Carolina. Advertising rates on request. Opinions expressed by contributors are not necessarily those of the North Carolina Chapter of the American Institute of Architects. Subscription price: One year $3.00; Two years $5.00. Single copies 25 cents. Kindly notify Southern Architect in the event of change of address.
The number of advocates of the "one-contract" system for the construction of buildings in North Carolina, especially buildings financed with public funds, is definitely on the increase, according to our observation. Public opinion appears to be becoming slowly aroused and gaining momentum as one individual after another publicly states his views in opposition to the present "separate contract" system now required by State law where public funds are involved.

Attention has been focused on the prevailing situation because excessive delays in the completion of projects beyond contract completion dates have become an acute and practically universal problem. A number of public officials and private citizens feel that the problem is one of serious concern to the taxpayer. They have made inquiries and discovered the inefficiency and duplication of effort and expense necessitated by the present system. They wonder why North Carolina is unique in this respect compared with neighboring states. Neither South Carolina, Georgia, Tennessee, Virginia nor Kentucky has such a law.

At the risk of alienating some of his most respected friends and business associates, an Architect must be honest with himself and concede that having no less than four or more entirely separate prime contractors on a single building project is a paradox of incomprehensible proportions in this day and age of automation and production-efficiency consciousness. Imagine, if you can, any manufacturing operation whose time-scheduled finish product must depend upon four or more separate and distinct processes within the same plant where the cooperation and cohesion of effort between each department is utterly dependent upon the temperament, efficiency, attitude and convenience of each of the other departments and, furthermore, with the superintendent of each department having equal authoritative status. We do not believe the general public is aware of the fact that the exact parallel of this situation does actually exist today in the construction of public buildings in our State. It will continue to exist until the people decide that the law should be abolished.

We know this subject can be controversial and, like all other subjects, there are two sides to it. We are familiar with the arguments on both sides. We readily concede that there have been and still are contracting firms in all phases of the construction industry who are above reproach in contributing to this dilemma. Unfortunately, however, the prevailing condition involves the whole construction industry in North Carolina and they must be included in this criticism. To be perfectly frank, it appears that all of us are victims of a situation created by a law which, when enacted in 1925, might have been needed and well-intended, but is certainly obsolescent now. The need no longer exists, if indeed it ever existed in the public interest.

Time is our most precious commodity. Time is expensive — much more expensive than what little profit or handling cost, if any, a general contractor might tack on to his single contract bid. Vertical authority in a building operation is a necessity. Divided responsibility for the coordination of the component parts of a total building is in most cases an unnecessary evil.

If there are those who sincerely believe the present system is less costly and more efficient, then may we advance the thought now that, as a public service, an immediate movement be commenced to make prime separate contractors of roofers, concrete workers, bricklayers, plasterers, painters, carpenters, etc. Perish the thought! Nevertheless, if the pro-argument holds in the case of heating, air conditioning, plumbing and electrical work, it follows that it should be even more valid for these other trades because, by the same theory, we could assume that our buildings would then be of lower cost and higher quality than ever before. Such a utopian result hardly sounds logical.

Robert L. Clemmer, President
N. C. Chapter A.I.A.
THE DATE ON THE MAGAZINE

To the Southern Architect:

In the current issue of the "Southern Architect" just received this morning, there is a statement from the Publications Committee, which they close by saying "—and we welcome any comment on our work." I believe the committee has been so wrapped up with format and appearance, that they have overlooked some of the most basic policies in the pure mechanics of getting out a publication.

Let me state two or three comments, which are not only mine, but has been talked about by many Architect's in the eastern part of the state. The current copy was received in my office on September 5th, yet the issue is plainly labeled AUGUST. Any magazine publisher would tell you that is all wrong, as it should be dated the current month, and if the publication comes out near the end of the month, should be dated next month.

Then the Architectural calendar that they publish is always at least 50% ancient history. The first five items have long since been over, and the sixth one is a little late — notifying the members that the deadline for next month's issue is Sept. 1 when the magazine is not received until the 5th. No notices of meetings should be published that are going to happen when the magazine in which they appear reaches you a month after they have happened. That calendar should contain notices of September meetings that will occur after mailing of publication.

This is not a happening for the current issue only, but has been happening from month to month.

Another glaring example was the publication of the complete program, etc., for the Asheville Convention in the magazine that was received after the convention was over.

If this is caused by delays in the printing concern getting the publication out on time, get a new printer. If its the fault of the editorial department, make a change.

I hope that you will not think that this criticism is anything personal for it is not. But I feel that this publication belongs to all of us, and as for information which we would like to have about meetings, etc., its a pretty sorry representative. And it is something that could be easily be corrected. No good magazine editor would permit a single notice of a meeting to appear, that was to happen before the magazine reached the membership.

Just wanted to write you this letter, as it is not only my own personal feelings about the matter, but the feeling of many other architects with whom I have talked.

Yours very truly,
Raymond Fuson, AIA
New Bern

You are absolutely right about the Calendar see P 30. Publication date of the magazine is the 15th of each month but has any architect ever made a deadline on time?

---NCAIA Publications Committee

JOHN KNOX SHEAR

To the Southern Architect:

Since the death early last year of John Knox Shear, editor of the ARCHITECTURAL RECORD, efforts have been under way to raise funds to establish a permanent memorial to him. The aim of the committee is a traveling scholarship in architecture to be awarded regularly (annually or biannually) to a senior student in the Department of Architecture at Carnegie Institute of Technology where John Shear was head of the department for many years. To date $12,000 of a desired $40,000 has been achieved. John Shear got around the country a great deal when he was editor or the RECORD and spoke before chapters everywhere. We felt that among your membership there would be people who knew John Shear who would be interested in contributing to this memorial. Contributions should be made payable to the Carnegie Institute of Technology, and, addressed to the John Knox Shear Memorial Fund, Carnegie Institute of Technology, Schenley Park, Pittsburgh 13, Pennsylvania.

Yours very sincerely,
John Pekruhn
SEND FOR CATALOG M-59 SHOWING NEW POSTS, HANDRAILS AND GRILL-O-METRICS

460 MELWOOD STREET, PITTSBURGH 13, PENNSYLVANIA
COPYRIGHT 1959 BY BLUMCRAFT OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA
DIETARY DEPARTMENT ADDITION
EAST CAROLINA COLLEGE
greenville

architects
F. CARTER WILLIAMS, AIA
raleigh

engineers
T. C. BROWN & ASSOCIATES, P.E.N.C.
raleigh

contractor
DUNN BUILDING SUPPLY CO.
greenville

This building is a two-story addition with a new cafeteria at the second floor existing kitchen level and student activity rooms at ground floor. The total area is 14,164 square feet and the cost for all contracts including a certain amount of new kitchen equipment and cafeteria serving line was $155,160.90.

Construction is cavity wall brick with some interior partitions of block, terrazzo cafeteria floor, marble floor paving in Kitchen area, facing tile wainscot, acoustic plaster. Exterior trim is limestone.
The new 98,000 sq. ft. Winter Park Junior High School is located in the center of a fast growing residential area in the approximate geographical center of New Hanover County. The program called for a complete plant to house 900 students in grades 7, 8 and 9. Thirty-eight teaching stations have been provided with a possible expansion of the capacity in the future to 1,250 students. Total cost of the project is $960,000.

Using a modified campus type of layout, the basic plan consists of four units: An academic building, an administration building, an activities building, and a band room-music building. The academic building houses twenty-nine basic classrooms, teachers' offices and toilets on the second floor which is not shown on the plan and the library, lecture room, home economics and science departments on the ground floor. The administration building is located in the center of the campus and is connected to other buildings by an all weather covered concourse. The activities building contains the lunchroom, auditorium, gymnasium, arts and crafts rooms and vocational education shops. The band room and its associated rooms are isolated in a separate building.
JUNIOR HIGH SCHOOL

architect:
LESLIE N. BONEY, AIA
wilmington

owner:
BOARD OF EDUCATION
new hanover county

contractor:
ANDERSON CONSTRUCTION CO.
dunn
The Second Baptist Church of Shelby, having outgrown its present facilities, plans construction of a new church plant on a new site a short distance from its present location. The first unit, containing 17,000 square feet of floor space, has been designed with particular attention to future expansion and to preservation of the large and beautiful trees abundant on the old home site. An outstanding feature of the design will be the two story exterior corridor, partially enclosed by vertical screen tile panels. The design has been kept simple so that it will not detract from the future Sanctuary. Housed within this first unit, will be all departments of the Sunday School, offices, choir room, and an interim Sanctuary, seating 430, which will later become a Fellowship Hall in later stages of growth. The Structural system will consist of load-bearing masonry walls with prestressed concrete double-tee slabs for second floor and roof. First Floor will be slab on grade.
CHURCH

architects
WILBER, KENDRICK, WORKMAN AND WARREN
charlotte
On the State College Campus, there is now under construction a handsome new building to house the widely scattered facilities of the present Students Supply Store, the Watauga Book Shop and Freshman Book Room, the Technical Press and the Country House operation. The structure will provide enlarged sales areas for books, engineering and school supplies, sports equipment, luggage and college gift items as well as a soda fountain on the 10,000 sq. ft. main floor with storage, printing, mechanical equipment and truck-height loading dock in the 11,000 sq. ft. basement which is on ground level in the rear. Two freight elevators provide for moving merchandise from basement storage and loading dock to the sales floor. The large open selling area and controlled exits permit self-service operation except for very small items. A completely flexible lighting system and removable partitions in the main floor sales area permit changing displays and sales functions and the store fixtures were custom designed by the architect for flexibility of display and to allow for future changes in size or stock of merchandise.

The basement and main floor are reinforced concrete and the roof is steel frame, with a gypsum deck and a porcelain enamel facia. All brick walls, exposed inside and out, are laid up in Flemish cross bond to match the nearby existing dormitories but are distinguished from them by the fact that the headers are recessed and flashed to a dark color which emphasizes the pattern and results in a very decorative wall. A feature of the main floor sales area ceiling is the suspended metal baffles which conceal the air-conditioning ducts and yet allow the lighting fixtures above to shine thru.
for the taxpayer:

**facts and fancies about school buildings**

The problem of getting and paying for public education affects the average taxpayer more than almost anything else in civil life. It affects both his pocketbook and the welfare of his children. On a broader scale, it affects the welfare of both his community and his nation.

Yet, insofar as the planning of school buildings is concerned, almost nothing is surrounded by so much misunderstanding and confusion—to the detriment of both pocketbook and child.

Each year, the community establishes a budget to pay for all of its public services. Each year, some one-half to two-thirds of that budget is earmarked for education. When taxes are raised, as they have been steadily over the past decade, the property owners who bear the load understandably cast about for some means of relief.

A convenient target for this unrest is often the school building, and this unrest expresses itself in a demand for elimination of frills. If this word is equated with waste, the community is indeed on solid ground. But often it is not, and the community suffers from a wave of misplaced and costly “economy.”

*Here is a fact which comes as something of a shock to the citizen who hears it for the first time:*

If we got our new school buildings for nothing, it would make very little difference on our local tax bills. The average new school-building program takes only between 10 to 20 cents from the school tax dollar. (This is not to say that it is an unimportant expenditure, because the way this money is spent affects the whole educational dollar.)

Are we spending too much on our new school buildings? To put the answer in perspective, consider what this money will buy—and what we spend it on.

If the average home owner pays an annual community tax bill of $300 and education takes half of the budget, he pays $100 for the total school program. Assuming that construction takes 15 per cent of the school tax dollar, he pays $15 for new school buildings during the year. The same man is apt to spend that much taking his wife to a good restaurant for dinner. Or, to establish another analogy, the cost of a modest television set would pay for a 10-year school construction program, or five years at double that building volume.

*In all honesty, we must conclude that school buildings are not too expensive so long as they are not inadequately built.* These are not mere opinions; national figures show that the cost of all building has tripled during the past 20 years. But the cost of school buildings has only doubled during that period. The fact is that the school building is still the best bargain, dollar for dollar, on the building market.

There is, however, a hidden but very real cost in school building and every citizen should be aware of it. It is the cost of operating and maintaining the school plant each year. This is why a number of authorities state that only the wealthy community can afford a cheap school.

*The annual cost of operating and maintaining school buildings in many communities is as much as the community pays each year to build its schools.* This means that the better the materials, and the sounder the construction, the more money will be saved in the long run.

How, then, can money be saved in a school building? There are a number of ways, but significant savings are seldom the result of any one person’s action. They depend upon a combination of factors; in the last
analysis, they depend upon the community and its understanding of the overall problem.

Here are a few ways in which money can be saved without reducing schoolhouse quality:

*Acquire school sites—large enough for long-term building expansion—long in advance of the need, perhaps as many as 10 years ahead. Population increases and shifts don't happen overnight; a comprehensive community land use and projected population study may be a very good investment.*

*Practice sound financing.* The difference between economical financing and expensive financing can amount to as much as 15 per cent of the total construction cost. Often as much as one-third of the community's school debt service cost is in interest charges.

*Design for ultimate use.* This means planning for long-range needs so that additional units may be added and such items as utility connections can be made without costly tearing down and re-building.

*Plan school projects more than the usual year ahead of the need.* Haste in building makes a great deal of waste. Give your architects time to study the design problem and weigh comparative techniques and materials. Not only will this save a good deal of money in itself, it will allow more precise preparation of architectural specifications and insure closer bidding by contractors. It will also allow contracts to be awarded on an intelligent basis; prices are often driven up sharply because too many building projects are dumped on a saturated market at one time, when competition is absent.

*Ask your school board and their architects to insist on use of first-class materials to cut maintenance and operating costs.* Poor insulation, for instance, can result in heating costs that are as much as 75 per cent higher than if high-quality insulation were used.

*Keep an open mind on design.* It is the practicing architect's professional responsibility to keep abreast of new techniques, studies, materials, and changing conditions in the building industry. The "gingerbread" facade of a half century ago is both expensive and a poor way to build. The form of the truly contemporary school is designed from the inside out, both to plan properly for the educational process and to produce economies. Today's school buildings are attractive workshops, rather than the grim monuments of fifty years ago.

You may be startled by some innovations. For example, a number of schools in various parts of the country have recently been planned for central air-conditioning to save money. Comparative bids on several design schemes in one case showed that the cost of the air-cooling system was more than balanced by a reduction in window area. Considerable design changes are also taking place in localities where closed-circuit television is being used to solve the problem of large-class teaching and add a new visual dimension to education.

*Avoid fast-buck and universal-solution schemes.* There is simply no one design, proprietary school plan, package scheme, or prefabricated building product available today which can compete—either in quality or price—with a school building designed and built according to local needs. Similarly, avoid the stock-plan pitfall. It is often difficult for the average citizen to understand why one stock plan cannot be re-used for all the schools in the district for a number of years.

*The reasons are really quite simple:* The soil condition, land contours and grades, drainage characteristics, and utility connections of sites vary greatly, although these may not be apparent on the surface. No
stock plan can be drawn up for foundation work. Site exposures obviously differ; buildings have to be oriented differently according to exposure to winds, sun, and other climatic conditions; poor orientation can cost money in heating and cooling. Separate plans must be prepared for engineering work; the number of rooms and their electrical needs affect the total load, metering, and circuit distribution within a building. Again, heating plans are dependent upon orientation and weather, which may vary sharply within one geographical area.

Separate plumbing plans are required for differing connections and elevations. A similar situation exists with drainage plans. Building codes differ from one community to another, requiring many diverse methods of installation. And, as touched on previously, long-range planning requires units of differing sizes and facilities to be built at different times. To modify stock plans sufficiently to fit all these widely varying needs and laws, both natural and man-made, inevitably costs a great deal more than individual planning. Too, materials and equipment are being improved year by year. Flexibility in planning is needed to take full advantage of new technology.

Finally, stock planning is poor educational practice and any building which does not aid the educational process costs too much, however inexpensive. It is seldom realized that nearly every school within any given school system differs somewhat in teaching practices. Even so small a consideration as whether students in a life science class will be mainly taught at their seats or do most of their work at chalkboards will affect planning of wall units, the total amount of space needed, storage facilities, seating arrangements, and many other factors which guide the final design of the classroom itself. Proof of all this lies in a national survey conducted several years ago of state school systems in which not one single state recommended the use of stock plans to another state. Twenty-three states reported they had not used stock plans and did not intend to. Fifteen others reported having tried and abandoned them. Ten states reported using them, but mainly for extremely small structures. One of these reported the loss of $40,000 alone on the use of two stock plans which could not be used.

*Other authoritative studies*, involving public works structures on the federal and state levels, show clearly that the best results in terms of economy and end product have been produced by private practicing architects rather than by municipal architectural bureaus. In this respect, the fees paid to private practitioners have been found to be a very small investment in the best possible planning by professionals who compete on the basis of talent— as do physicians, lawyers, and other professional persons.

The planning and building of good schools is a professional job whose excellence depends on close teamwork by architect and educator. Yet even this, without effective community understanding and support, will produce less than the best result.

*It is the community's job to understand the need, insist upon the best means of satisfying it, and produce the means to finance it.* Of an estimated $52 billion to be spent on new construction this year only $2.9 billion is earmarked for schools. When we consider that $10.5 billion is spent annually on the consumption of alcohol, the comparative cost of something we need as much as good education does not loom quite as large.
This is the second in a series of articles on the historic buildings of North Carolina. The measured drawings are from the files of the Historic Architecture Research course at the School of Design, North Carolina State College. This program requires each student to complete before graduation measured drawings of some building of historical interest and it is conducted with the cooperation of the Committee on Historic Building of NCAIA, the North Carolina Department of Archives and History, and the Historic American Building Survey.
At the first of the nineteenth century, even the most devoted proponents of the Greek Revival movement occasionally ventured a design in the Gothic style. It was almost the middle of the century before such buildings had more than vague historical accuracy in their form or detail, and by then the romanticism of Sir Walter Scott's novels and the complete dedication of Ruskin's essays had almost overcome all architectural styles other than Gothic. Although the South was comparatively late in being converted to the Gothic Revival, several outstanding church buildings of that style remain in North Carolina. The Chapel of the Cross is among the finest and the most unpretentious of them.

The Episcopal congregation of the Church of the Atonement in Chapel Hill was organized in 1842 and construction of the chapel began the following year. Funds were soon exhausted and construction was halted. Principally through the efforts of William Mercer Green, Chaplain of the University, work was revived and the building completed in 1848. It is now connected to a larger building designed by Hobart Upjohn about eighty years later. The design of the Chapel has sometimes been attributed to Richard Upjohn or Thomas U. Walters. However, it seems more probable that the design was taken from plates in *Essay on Church Architecture*, a book published by Bishop Hopkins in 1836.

Despite the many ridiculous examples of the Gothic Revival, the style was more successful in the field of church architecture — even when pressed to the extreme of Upjohn's small board-and-batten rural churches. The Chapel of the Cross is one of those occasions when that conflict between romanticism and reason was peaceably and pleasantly resolved. In spite of the simplicity of its workmanship, the design of the western tower, the restrained ornament, and the handsome interior space show understanding and skill.

—Cecil D. Elliott, AIA
AN APPROACH TO NEW MATERIALS IN ARCHITECTURE


"The world's best building research laboratory is collectively in the offices of American architects." This is the slogan and motto of the various services provided by The American Institute of Architects to improve the compilation and dissemination of reliable information regarding products used in building. These Institute activities include the Clinic Service, Product Literature Competition, Research Advisory Service to Industry, Collaboration with the Producers' Council, Building Products Registry and the forthcoming Index of Architectural Information and Specifications Service.

The American Medical Association has a service called "New and Unofficial Remedies" in which there is an appraisal of new types of drugs and medication before sufficient time has elapsed for them to be officially included in the U. S. Pharmacopoeia.

It is not possible to list all the new "wonder drugs of the building industry." They are too numerous, too diversified and many of them too uncertain. It is presumed that it is more useful to discuss the role of the architect in order that we may make progress in the building industry and utilize adequately the new findings of the applied sciences and manufacturing without jeopardizing our responsibility to the owner.

A few distinctions and generalizations should be noted.

A. We should not overlook the new and improved versions of traditional materials. Some materials such as brick which we think of as being as old as civilization, are in their current forms practically new materials compared to the kind of bricks that were used by the Mesopotamians or that I used in China just thirty years ago. Other examples are wood laminates, treated woods, also vast improvements in glass and paint.

B. A most important thing to be borne in mind is that most of the troubles which architects, builders and owners encounter are due to materials used in combinations. There are many splendid products which are laboratory tested, factory inspected, labeled, guaranteed, etc. but they still go wrong in the building because of mis-application, unforeseen hazards of the occupancy process, unusual adjoining material, atmospheric conditions, etc., also due to changes in the dimensions of
the material which are not covered by the detailing and

to stresses induced by expansion and contraction. Mis-
takes just as bad can be made with old and conventional

materials as with the really new. The same limits and

precautions regarding limits of use, proper detailing,

etc. apply to both old and new material.

The individual architect seeking to find his proper

role in the research and development picture and en-
deavoring to make real the potential value of his office

as a part of the world’s best research laboratory has

to bear in mind several things: a. his responsibility to

his client, b. his responsibility to the building industry

in order that he may contribute reasonably to progress

in the building industry, c. his responsibility to pro-
ducers.

In any case the architect should demand test data

from reliable and impartial sources with the test pro-
cedures as close as possible to the natural hazards and

with tests conducted on materials in combination.

Also in relation to his client, the architect must

advise his client in terms of initial cost vs. long-range

value. The architect himself must be conscious of the

“extravagance of cheapness” and he must persuade his

client to allow him to design in terms of the annual

cost for the design life of the building including main-
tenance, repairs, replacements. There is altogether too

much tendency on the part of both private and public

bodies to get the lowest possible initial cost regardless

of the cost and trouble of maintenance in the next two

or three decades. The tendency seems to be to let

some future school board or board of directors worry

about the maintenance cost and heat loss, etc.

The architect in relation to the total building in-
dustry must share some of the responsibility for the

charge that the building industry is backward, medie-
val, etc., that it is not a 20th century industry.

By the nature of its operations the building in-
dustry cannot be made exactly analogous to the auto-
motive or electronics industry but the architect should

encourage continued industrialization of the building

industry. We must recognize that prefabrication in

its broadest sense means more and larger components

made in a factory and assembled at the site. This

helps to reduce some of the hazards of on-site fabrica-
tion in that better workmanship can control the natural

hazards and the problems growing out of expansion

and contraction.

The architect’s responsibility to the producers is to

be willing to listen to the sales representative if he is

well informed, he should try to follow the manufactur-
er’s directions but he should also insist on being in-
formed of the limitations of use. The architect should

share his experience with the manufacturer and report

problems and seek correction on the present job and

avoidance of trouble in the future. If there is difficulty

the architect should call for a fair investigation. This

has been available in the past through the Clinic Ser-
vice of the AIA and will now become part of the field

service of the Building Products Registry Service.

The architect can also assist the producers part of

the building industry by assisting in the determination

of the criteria for new or improved products. This

includes also more refined criteria for the varied appli-
cations of many types of products, more detailed than

can be established by a trade association as a common
denominator for all manufacturers of a particular type

or even than can be set up as a commercial standard by

voluntary industry cooperation. The Building Products

Registry will call upon the membership of the Institute
to serve on advisory committees to determine these criteria. It is hoped that these more precise criteria will ultimately get into the standards of A.S.T.M., A.S.A., etc.

Another responsibility of the architect is to report on both the successful and unsuccessful uses of new products and new versions of old types of material.

Scientists and engineers are trained from their earliest college years to write reports. Architects are generally not so conditioned but if we wish to hold our own as a learned profession we should do this more generally and more competently. There is a great wealth of information that is in the bottom file drawers, interesting experimentation and research that went into a particular job which has never been written up or reported.

Another responsibility of the architect in this area is follow-up inspection beyond the guarantee period, voluntarily, without waiting for the owner to report difficulties.

The usual period during which a contractor must be responsible for the proper performance of specified products is one year following the final completion and acceptance of the work. Almost any material should stand up for this somewhat limited period.

To know whether or not new materials are performing properly an architect should inspect a building after the expiration of the Maintenance Guaranty period and observe the performance of new materials with particular reference to materials with which they were used in combination.

If such inspections were made and the reports of unsatisfactory performance filed with The Institute, it would be possible to develop a mine of information which would be to the material advantage of not only the producers of materials, but also to architects who specify and use them.

Another long-range responsibility of the entire profession is to use our imagination and experience in demanding and describing types of materials which may not now exist. Chemistry and chemical engineering have developed so rapidly in the past two decades that it is not an exaggeration to say that almost any kind of desired material can be made to order. The scientists have learned to "manipulate the molecules" and we might as well have them doing it for the building industry as for space research and other kinds of industry. It is noted that 90% of the products now sold by Du Pont in large quantities, did not exist 20 years ago.

This consideration applies not only to entirely synthetic materials but to the improved processing of materials which heretofore have been used in building almost in their natural state, for example marble. As a result of the Research Advisory Service survey for the Marble Institute of America, they are now carrying on intensive research and development with the hope of finding ways to make their product more suitable for exterior use, to enhance color fastness, etc.

For the job on the boards we must of course utilize the best of currently available materials but at the same time we should say to the producer, "five years from now I expect you to have available a new product for this particular application which will have such and such properties, characteristics."

This is not a new idea in the architectural profession. Quite a number of products which are now standard items of material or equipment were at one time very special and worked out for the first time between the architect, the manufacturer and the fabricator.
Exclusive “Executive House” in downtown Chicago...

country’s tallest concrete frame and floor building rises 40 stories in 371 feet!

WHEN AMERICA BUILDS FOR THE FUTURE...
IT BUILDS WITH CONCRETE

This impressive $6,000,000 building with its 446 apartments brings luxury living to Chicago’s business district.

On the 100 ft. x 150 ft. lot, space was at a premium. To make the most of it, architects Milton M. Schwartz & Associates, Inc., and the Miller Engineering Company, both of Chicago, chose concrete. With it, apartments are big... ceilings a full eight feet. Yet floor to floor height is only 8 ft. 10½ in. Plaster is applied directly to the concrete.

And concrete saved money—an estimated $500,000. It saved time, made easier scheduling, too. Concrete’s always ready on short order.

Executive House sets a U.S. height record for concrete. Today, for high-rise buildings and monumental structures, more and more architects and engineers are turning to concrete.

Four concrete shear walls extending across the width of the building provide necessary resistance to wind forces.

PORTLAND CEMENT ASSOCIATION
1401 State Planters Bank Bldg., Richmond 19, Virginia
A national organization to improve and extend the uses of concrete
INGENUITY is imagination and foresight—determination and talent. It is a vital factor in a company like Atlantic Research Corporation—whose objectives today are new ideas and better products for tomorrow.

The company’s new building is an architectural statement of this concept—uncompromisingly modern, functionally beautiful in its simplicity of line.

SOLITE—one of today’s most versatile building materials—is naturally employed in the construction of such projects. The striking hyperbolic roof of the main entrance section utilizes Solite lightweight structural concrete. 1/3 lighter than ordinary concretes, Solite minimized dead load in the extreme roof pitch. Its low slump facilitated placement, finishing and afforded maximum workability.

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AIA NEWS

12TH HONOR AWARDS PROGRAM

The AIA’s 12th Annual program of National Honor Awards has been announced. It is for distinguished accomplishment in architecture by an American architect for any building in the United States, or abroad, completed since January 1, 1955. The 1960 program will be judged on January 20-22 at the Octagon by five Corporate members of the AIA representing various regions of the country appointed by the AIA Board of Directors. Notice of entry must be received by November 23rd with a registration fee of $10.00 per each building or group of buildings submitted. All entries must be received at the Octagon not later than January 15, 1960. The jury shall select one or more first Honor Awards for Distinguished Accomplishment in Architecture, and as many Awards of Merit in Architecture as deemed deserving. Certificates will be presented to the architects and owners of all buildings chosen in either classification, and in addition a stainless steel plaque will be presented for installation in all buildings receiving a First Honor Award. The certificates will be presented at the AIA convention in San Francisco April 18-23.

HOMES AWARD MADE NATIONAL

The 1960 Homes For Better Living Awards program will for the first time be national in scope embracing all fifty states. Sponsored by The Institute, in cooperation with House and Home and Life magazines, the purpose of the program is to encourage and give special recognition to good design and sound construction in home building. The four previous regional programs had more than 1,000 entries and resulted in such favorable recognition for award winning architects that the Institute advanced the program to national status. Entry slips must be received at The Institute with a $10.00 fee for each home entered by January 15th and the entry material by February 12th. All winning entries will be displayed at the AIA Convention, where the announcement of award winners will be made, and will be published in House and Home and a selection of the winning entries published in Life.

WORK SURVEY REvised

The American Institute of Architects has completely revised procedures for its Current Work Survey which reports on building construction work on the drawing boards of the nation’s architects. This account of building activity in the programming and design stage will enable economists and the building industry to accurately forecast the extent of building activity months in advance. Results of the AIA Current Work Survey will henceforth be announced every three months instead of semi-annually as previously.

Under the new survey procedure the nearly 9,500 architectural and engineering firms in the U.S. which handle building construction are being queried as to the firm’s size in terms of volume of business. From this “universe” a random sample of about 1,000 firms, representative of the total, will be selected for the quarterly reports. As a “by-product” of this survey, participating firms will be in a position to measure and evaluate input and output of design work and compare their own volume with regional and national trends and averages. AIA will announce the results of its first Quarterly Current Work Survey early in 1960.

U.S. ’60 CONSTRUCTION TO BE RECORD

U.S. construction expenditures will reach a record total of more than $55 billion in 1960, the professional building magazine Architectural Forum predicted recently. “Although this may be only 1.5 per cent above 1959,” Forum reported in its annual building forecast, “it is more impressive than it looks, for 1959 will be an exceptionally big year for building.” Construction expenditures this year will probably reach $54.9 billion — a jump of 11.8 per cent above 1958, three-and-one-half times the average increase of the past few years and more than twice the most optimistic predictions. 1960 will be the sixteenth year in a row which building activity has expanded.

The leveling off of total construction next year, Forum said, will result mainly from the same factors which swelled the 1959 volume — but in reverse. A decline in house building during 1960 seems “inevitable,” and highway construction will do well to hold its own. At the same time, there will be off-setting gains in the construction of nonresidential buildings of all kinds. Private construction is expected to gain more in 1960 than publicly financed construction, reversing a recent trend. This trend saw public construction increase eightfold from 1946 to a projected $16.4 billion in 1960, private construction only fourfold to $39.3 billion. Next year public construction will be up only ½ per cent, private almost 2 per cent.

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THE OCTOBER 1959 SOUTHERN ARCHITECT
FRIEDRICH O. JACKLE, a refugee from uprisings in Indonesia, hopes to relocate in the United States. His experience and training are in architecture and architectural drawing, with major experience in residential work and the supervision of its construction. He is not a designer, but has experience in the preparation of working drawings and estimates.

Jackle attended a vocational training school (1948-50) and a Technical School (1950-51). His final examinations included mechanics, descriptive geometry, physics, chemistry, civil architecture, hydraulics, surveying, knowledge of materials and tools, architectural drawing, hydraulic drawing, calculation and estimates, and practical surveying.

His first employer was a contractor specializing in offices, factories, and housing. In that office he was charged with the supervision of construction and estimating. At present he is working, while awaiting relocation, in the office of an architect in Holland. This firm specializes in structural alterations such as rebuilding and modernizing stores and residences.

Mr. Jackle is twenty-six years old and of Dutch ancestry. He is married and is expecting his first child in February 1960. He is studying English and understands some English, but he finds it hard to speak it.

A promise of employment is needed to assist in sponsorship of his entry into this country. Please write the Peace and Service Committee, United Church, Raleigh, N. C.

PLASTIC DESIGN FOR STEEL STRUCTURES

Architects and structural engineers in Virginia and North Carolina will have an opportunity this Fall to learn about the practical applications of the new theory of plastic design for steel structures. A series of lectures will be given in Charlotte, N. C., Raleigh, N. C. and Richmond, Va. under the sponsorship of the American Institute of Steel Construction, the national association representing the structural steel fabricating industry.

The six lectures will be given in Charlotte on Tuesday afternoons from 1:00 to 3:00 P.M. starting October 20, in the Auditorium of the Esso Building, Park Road Shopping Center. In Raleigh, N. C. the lecture series will start on Wednesday, October 21, from 1:00 to 3:00 P.M. in Room 242, Riddick Hall, North Carolina State College. These lectures are possible through the cooperation of the Civil Engineering Department of the School of Engineering, North Carolina State College. In Richmond, Va. the six lectures will start on Thursday, October 22, from 1:00 to 3:00 P.M. in the Auditorium of the Southern Bank & Trust Company Building, 3201 West Cary Street.

The new structural design method enables engineers to utilize steel's strength more fully than before in one and two story buildings, and produces considerable savings in design time and steel tonnage. Its development resulted from more than ten years of research by AISC in cooperation with Lehigh University, Allentown, Pa.
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THE OCTOBER 1959 SOUTHERN ARCHITECT
ARCHITECTS AND BUILDERS IN THE NEWS

THE OCTOBER 1959 SOUTHERN ARCHITECT

HOME BUILDERS CLINIC

The National Association of Home Builders and the American Institute of Architects today announced the first joint “Design Clinic” to be held at the University of Florida, Gainesville, Florida, November 4, 5, 6 and 7. The Clinic is designed to further the home builders’ appreciation of design and to give architects an opportunity to consider the home builders’ problems of costs. The Clinic will be an extensive and exhaustive one. Sessions will run through the mornings, afternoons, and evenings. Among the prominent panelists or speakers at the Clinic will be Prof. James T. Lendrum, head of the Department of Architecture at the University of Florida; Edward Fickett, AIA, of Los Angeles and chairman of AIA’s Committee on the Home Building Industry; Stanley Edge, Pittsburgh marketing consultant, and James Smith of Miami, Florida, an interior designer.

Among the subjects to be discussed at the sessions are: basic design principles, involving such things as line, form, color, rhythm, texture; how to apply basic design to the house, ways of making a house look either smaller or larger, ways of making variations between one house and another; and the relationship between structural forms and design, the planning of houses, particularly in the living areas, kitchen areas and the circulation within these areas.

Builders will be asked to bring plans of houses they have built and a critique will be held by an architectural panel and the audience. Similarly, builders will hold a critique of architects’ designs or prize-winning houses from the standpoint of costs to the builders. Another session will relate to marketing and the effect of design on selling. This will be a merchandising session and will include several case studies from the first announcement by the builder through signs or other methods to the actual sale of the house.

The tuition fee for the Clinic is $35. Applications should be sent to Richard J. Conavan, Director NAHB Construction Department, 1625 “L” St., N.W., Washington 6, D. C., and checks made payable to the National Association of Home Builders. This program is a direct result of AIA’s joint endeavors with NAHB to promote collaboration between home builders and architects.

CLEMSON COMPETITION

Three students of architecture at Clemson College, Clemson, S. C., won a total of $400 in prizes at the third annual Solite Awards Competition held there. The winners were Frank E. Lucas of Charleston, S. C.; John A. Parille of Bangor, Pa., and Benjamin Pearce of Fort Mill, S. C. Lucas received the first prize of $200 for his Thesis Problem “Library for Charleston, S. C.” A second prize of $150 went to Parille for his “Museum for Jackson- ville, Fla.” Pearce received the third prize of $50 for his design of “Town Hall for Fort Mill, S. C.”

The contest is sponsored by Carolina Solite Corp., producers of Solite lightweight aggregate for Solite manufactured units and structural concrete. Students are assigned a specific architectural problem, and winning entries are those which best meet the requirements set forth.

RALEIGH COUNCIL ELECTS FISHEL

On September 17 the Raleigh Council of Architects elected Stanley Fishel, AIA, as President. Fishel, right above, took office as of the meeting, succeeding Turner Williams. Others elected were Joseph R. Flowers, AIA, left above, as Vice-President; Gilbert Slack, next to left in photo, Secretary; and James P. Milam, AIA, next to right above, as Treasurer.

NEW FILM

The fifth in the AIA series of films, titled “Designing A Better Tomorrow — A Career In Architecture”, has been prepared by the Institute. It is designed primarily for showing to high school and junior high school assemblies, preferably at the level of the 8th, 9th and 10th grades. It is semi- animated, in color, runs 13½ minutes, and is cleared and suitable for television use.

MOVES OFFICES

A. G. Odell, Jr., FAIA of Charlotte, announces the moving of the office of his firm from 109 West Third Street to 102 West Trade Street in Charlotte.

OPENS OFFICES

Walter E. Blue, Jr., Architect of Wilmington, announces the opening of an office for the practice of architecture at 2820 Lawndale Drive in Greensboro.

James R. Pittman, Jr., AIA formerly of Raleigh, announces the opening of an office for the practice of architecture at 108 Highland Avenue in Fayetteville.

Angelo Floridas, AIA of Charlotte, announces the opening of an office for the practice of architecture at 513 South Tryon Street in Charlotte.

Mrs. Lester D. Clemmer, Mother of N. C. Chapter AIA President Robert L. Clemmer of Hickory, died September 17th in Stanley, N. C. where she was a life-long resident. Last May 14th Mr. and Mrs. Clemmer observed their 60th Wedding Anniversary with their children, grandchildren and great grandchildren. Funeral services were held in the Christ Lutheran Church in Stanley, in that her Stanley Methodist Church was undergoing extensive remodeling. Southern Architect extends deepest sympathy to all of the family.
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FITZPATRICK MEMORIAL AWARD

Five leading building industry associations have joined in the establishment of an F. Stuart Fitzpatrick Memorial Award to be given annually in honor of the late building industry pioneer for "outstanding individual achievement in the unification of the building industry." Mr. Fitzpatrick, for 25 years the manager of the construction and civic development department of the United States Chamber of Commerce, died in 1956 after long and brilliant personal leadership in unifying the diverse elements of the building industry. Among his achievements was a pioneering role in the founding and growth of the Building Research Institute of the National Academy of Sciences.

Sponsors of the F. Stuart Fitzpatrick Memorial Award are: The American Institute of Architects; the Building Research Institute; the Producers' Council; the Associated General Contractors, and the National Association of Home Builders. Individuals named to represent the sponsoring groups and serve as advisors to the fund trustee, named as the Union Trust Co., of Washington, are: Leon Chatelain, Jr., past president of AIA; Edmund Claxton, vice president of the Armstrong Cork Co., and past president of the BRI, William Gillett, vice president of Fenestra, Inc., and past president of the Producers' Council; Welton A. Snow, manager of the building division of AGC, and John M. Dickerman, executive vice president of NAHB.

Mr. Chatelain, chairman of the advisory group, announced that proceeds of the fund, solicited from within the building industry by Douglas Whitlock, chairman of the Board of the Structural Clay Products Institute, will be used to make an award annually to the American "who best typifies the spirit, vigor, and accomplishment which the building industry recognized in the late F. Stuart Fitzpatrick."

"Mr. Fitzpatrick left us all an inheritance of great accomplishment in obtaining the cooperation of the many elements of the building industry for a unified effort in the public interests," Mr. Chatelain said. "We owe him a perpetual debt of gratitude. To discharge this debt, we feel it is our responsibility both to carry on his principles and to recognize and honor each year, beginning in 1960, the person deemed to have made the outstanding individual achievement in the unification of the building industry."

"As a focal point of organized effort in the nation's biggest industry, Mr. Fitzpatrick was instrumental in broadening the scope of FHA as an instrument for aiding private building," Mr. Chatelain said. "But this was only another of his many interests. He worked tirelessly for the modernization of building codes. He was an ardent supporter of sound zoning and city planning; he had a keen interest in highway problems and understood, long in advance of his time, the vital necessity of considering these environmental problems as a single concern. To him, befitting the title he gave to his department at the United States Chamber — construction was civic development. It is our purpose to see that his name will never be forgotten."
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