Sarasota County’s Eight New Schools
Smith and Korach, A.I.A., have contributed many outstanding institutional buildings in the greater Miami area since 1938 when the firm was formed by Donald G. Smith, A.I.A. and Irvin Korach, A.I.A. In the design of Mt. Sinai, which will have 417 beds in its 215 rooms, accent was placed on ease of maintenance and patient comfort. Plumbing installation in the entire hospital is being handled by Markowitz Bros., Inc.
LUXURY AT LOW COST

McGuire Hall Annex, Medical College of Virginia, Richmond. Now under construction, the flowing horizontal lines of the building terminate in marble verticals. Use of aggregate transfer panels gave the architects complete freedom of color choice. ARCHITECTS: Carl M. Lindner & Son, A. I. A., Richmond. ENGINEERS: Torrence Dreefa & Associates, Richmond, Structural; Carlton J. Robert, Richmond, Mechanical. CONTRACTORS: Graham Brothers, Richmond.

The first aggregate transfer job in the East is now in progress at the new McGuire Hall Annex of the Medical College of Virginia.

Using this process, architects Carl Lindner & Son were able to combine luxurious appearance with economical building. Panels of reinforced Solite lightweight structural concrete are faced with chips of pink Georgia marble and sandblasted to accentuate them. The panels are then applied to a rigid steel frame. The result: a building embodying the beauty, durability and economy of Solite lightweight concrete construction.

Inside, Solite also was used in floors and walls, and all partitions are exposed Solite masonry units. This is another outstanding example of Solite's compatibility with the latest in building techniques and materials.

PLANTS:
Bremo Bluff, Va.  

OFFICES:
Box 9138, Richmond, Va.  Box 1843, Charlotte, N. C.
Box 147, Columbia, S. C.  Box 6336, Raleigh, N. C.
Box 5735, Bethesda, Md.  Box 904, Jacksonville, Fla.

FOR BETTER BUILDING — Consult your architect or engineer. Whatever your construction needs, professional advice can save you time and money.

APRIL, 1959
In This Issue ---

Letters .................................................. 4
Hotel Commission Rules Now Undergoing Revision .......... 5
What's Happened to This Policy Code? ......................... 9
School Plant Economy ...................................... 11
What Does It Really Mean? .................................. 11
It CAN Happen Here ......................................... 13
By Philip H. Hiss
Eight New Schools in Sarasota County ......................... 15-24
1...Brookside Junior High School ........................... 15
2...Alta Vista Elementary School Addition ................. 17
3...Riverview High School .................................. 18
4...Fruitville Elementary School Addition ................. 20
5...Englewood Elementary School .......................... 21
6...Booker Elementary School ............................... 22
7...Brentwood Elementary School ......................... 23
8...Venice Junior High School .............................. 24
The President's Message ...................................... 26
By John Stetson
Match Flooring Materials to Service Conditions ........ 29
By P. W. Clyses
News and Notes ............................................. 32
Advertisers' Index ......................................... 35
Can Substitution Be Controlled? ............................ 36
An Editorial

F.A.A. OFFICERS — 1959
John Stetson, President, P. O. Box 2174, Palm Beach
Francis R. Walton, Secretary, 142 Bay Street, Daytona Beach
Joseph M. Shiflet, Treasurer, Suite B, Professional Center, Winter Park
Robert H. Levison, First Vice-President, 425 So. Garden Ave., Clearwater
Verner Johnson, Second Vice-President, 250 N. E. 18th St., Miami
Arthur Lee Campbell, Third Vice-President, 115 So. Main Street, Gainesville

Roger W. Sherman, Executive Director, 302 DuPont Plaza Center, Miami 32.
Vitreous Enameling Iron Tub: Briggs unique process permits porcelain finish to be fused into the metal rather than merely on it as occurs with other finishes. Result: full-depth tubs are chip- and acid-resistant, colors won't fade.

YES, THERE IS A DIFFERENCE IN PLUMBING FIXTURES!
Briggs Beautyware proves it with these features... and more!

Smooth, easy-cleaning contours and vitreous china surfaces have the built-in beauty of Briggs inspired compatible colors. Certain to be points of pride in the bathrooms you install.

Nearly noiseless, syphon-jet operation of the “Emperor” Closet is a Briggs feature that makes a difference... as does the streamlined, one-piece styling, fashioned of high-density vitreous china.
Briggs Manufacturing Company • Warren, Michigan

Interchangeable Color Inserts for new Briggs fittings—an idea that color-matches fittings with Briggs fixtures. Inserts slip neatly, securely into place... never lose their good looks.

BRIGGS BEAUTYWARE
Letters

P/R IN PRACTICE

EXEC. DIRECTOR, FAA:

We have just closed the doors on the Tenth Annual Greater Miami Industrial Exposition.

It is my pleasure to congratulate the Florida Association of Architects on their presentation in the show—also the Florida South and Broward County AIA Chapters are to be commended for their part in setting up and manning the exhibit.

The Exposition Steering Committee has asked me, as Chairman, to express our thanks to the architectural profession for a very valuable contribution to the interest of the exposition. We feel that the presentation told a good story; and it added to the prestige of the entire show.

You will be interested in knowing that your immediate past president, H. Samuel Kruse, has agreed to serve as a member of the Steering Committee. We feel that his advice will add a great deal to the worthiness of the exposition in coming years.

We will continue working locally toward the expanding development of our State; and we value the cooperation of the architectural profession toward this end.

OTIS E. DUNAN
Chairman,
Greater Miami Industrial Exposition

A BOOST FOR CONVENTION EXHIBITS

EXEC. DIRECTOR, FAA:

No doubt the question of manufacturers' exhibits at the Convention will be much discussed this year. I sincerely hope that it will be possible to continue the exhibits as in the past.

We have to keep posted on available materials and services. Being able to look over the exhibits at the Con-

(Continued on Page 6)

It Drew 200,000 . . .

Architects were a part of the 10th Annual Greater Miami Industrial Exposition which, March 6-15, drew over 200,000. Their exhibit, lower right above, was the display developed two years ago by Broward County, and a montage of the Florida Architect. Florida South members set up and manned the booth . . . Left, Otis E. Dunan, right, exposition chairman, with City Commissioner Otis Shiver acting for Miami Mayor High at the show's official opening. With them is Major General Alvord V. P. Anderson, Robins Air Force Base, Macon, Ga., who gave the keynote address at the Exposition's kick-off luncheon March 6.

THE FLORIDA ARCHITECT
Use Tropix-Weve Doors for:
- Space Dividers
- Wardrobes
- Storage Closets
- Screens
- Room Dividers

* Shoji Panel

Provide complete accessibility without requiring the floor and wall space of swinging doors. This new development using Slide-A-Fold door principle provides smooth, dependable action for a lifetime. Saves space — and creates beautiful effects at minimum cost. Available in Shoji, Panel and Woven Wood designs. All standard and custom sizes. Also produced in accordion doors, window shutters, etc.
SPEEDY . . . VERSATILE

- For the rapid transportation of orders between departments — in factory, office, or hospital . . . to speed a "hot" sample from mill to laboratory . . . delivering a cannister of oil from tanker to test lab before unloading . . . nothing— but nothing, — is as versatile as a Grover Transitube installation.

- Whether you specify the conventional type system with but four or five stations, or decide on the newest electronically controlled Dial-A-Matic installation of fifty or more stations, you'll be serving your client best by using Grover equipment, backed by 43 years of constant application in this field alone.

- May we be of service to you — anywhere in Florida?

ASSOCIATED ELEVATOR & SUPPLY COMPANY
501 N. W. 54th St., Miami

LETTERS

(Continued from Page 4)

vation saves much individual time in the office. Some manufacturer's representatives who used to call on us periodically now seem to depend on the Convention contact and this is the only time that we see them.

As long as the manufacturers are happy, and the program is beneficial to the FAA, and at the same time providing a service to the members who attend, it would seem most unwise to give it up.

There is certainly no compulsion to use or to specify anything because it is exhibited, nor to avoid the use of any product because it is not. Participation on the part of the exhibitors is purely voluntary. In fact at Clearwater we were besieged with applications after available space was gone.

I believe that the presence of the exhibitor personnel adds to the general enjoyment of the Convention.

I have discussed this matter with several other members in this area and they all agree with the viewpoint outlined above.

JACK McCANDLESS
Treasurer, Fla. Central Chapter.

On the matter of including a product exhibit as a central part of FAA Convention activities, opinion is divided in some quarters; and the division carries through the ranks of manufacturers as well as architects. Other opinions will be welcomed for publication here, for the subject has become a matter of real importance.

INTERESTED . . .

Editor, FA:

I have received my February issue of The Florida Architect and have read with much interest the articles contained therein.

Please accept my thanks for sending this publication as I shall look forward to it each month.

HUGH E. WILLIAMS, JR.,
City Commissioner, Tallahassee

Editor, FA:

Thank you very much for including my name on the mailing list to receive The Florida Architect each month. I shall look forward to receiving this publication as I am extremely interested in the progress of architecture, especially in Florida.

It is my sincere belief that through collaboration architects, city planners, engineers and landscape architects will achieve the most satisfying solutions to their respective development problems. Whenever I might be able to render assistance to your organization, please call on me.

ROBERT L. MASIBURN,
City Planner, Pensacola

The Florida Architect will be sent to any civic official interested in activities of the architectural profession if his name and address will be forwarded by any AIA Chapter member.

HOTEL COMMISSION RULES NOW UNDERGOING REVISIONS

Hotel and Restaurant Commissioner RICHARD EDGERTON has requested that an FAA Committee review work now being done to reorganize Florida's hotel code and the Commission's rules and regulations. Work of revising the now obsolete document has been going forward for the past three months. M. Tony Sherman, of Miami, and Curt Schell, the Commission's supervising architect for the Jacksonville area, have been working together and are nearly ready to submit their recommendations to Commissioner Edgerton.

As it is now shaping up, the new hotel code will be made available in a plastic binder designed to hold loose-leaf sheets — the idea being to make it possible for the Commission to issue revisions as may be needed in the future without the necessity of reprinting a completely new document. As soon as preliminary approval has been given, the new document will be reviewed by an FAA committee recently appointed by FAA President John Stetson.

Named as chairman of the hotel code review group was FAA Vice president VERNER JOHNSON. Serving with him will be ELLIOTT B. HARLEY, St. Petersburg, JACK MOORE, Gainesville, and FRANK J. SIMELAR, Fort Walton, formerly a supervising architect for the Commission.

THE FLORIDA ARCHITECT
How to design homes with "built-in" maid service!

Combine the ingenuity of architectural design with the wonderful ease of built-in electrical equipment... and you'll give your clients leisure they will praise you for through the years. Built-in electric appliances save so much time and work — they're like having an extra maid on the job 24 hours a day. They're the most glamorous, most work-free helpmates you can choose... the first choice of Florida home buyers.

The trend is overwhelming to Electric Living!

**ELECTRIC COOKING**  
1948: 72,550  
1958: 288,650

**ELECTRIC WATER HEATING**  
1958: 315,235  
1948: 64,760

*Give your clients a blueprint for Better Living... Electrically!*

**FLORIDA POWER & LIGHT COMPANY**  
HELPING BUILD FLORIDA

APRIL, 1959
A kitchen at home in apartments!

Preference for Mutschler "design original" kitchens is not confined to builders and owners of individual dwellings. For apartments, too, they are the obvious choice. All homemakers are quick to recognize the value of Mutschler's many exclusive features, the superb cabinetwork in both natural-grain finishes and decorator colors ... and the Mutschler planning services that fit the kitchen to personal operational patterns. Consulting services of Mutschler kitchen specialists are available without cost to architects and builders. For complete information, mail coupon.

SEND COUPON FOR COMPLETE INFORMATION

MUTSCHLER KITCHENS OF FLORIDA
Subsidiary of Mutschler Brothers Company, Nappanee, Indiana
2956 N.E. 12th Terrace, Oakland Park, Fla. Phone: Logan 4-8554
Please furnish me with information about your services for builders and architects.

name


univ. of fla. libraries
arch. & fine arts library

THE FLORIDA ARCHITECT
What’s Happened To This Policy Code?

This is an important question raised by the growing interprofessional conflict between architects and engineers. If the FAA-FES Code is workable, why isn’t it working now?

Joint Architect-Engineer Policy Code

The Architect-Engineer Policy Proposal, first drafted by a Joint FAA-FEC Committee, has been subject to further study and revisions. Here is its final form as approved and accepted as a code of good practice by both professional organizations.

PREAMBLE:
By its very nature the rendering of professional services by the design professions must be on a high ethical and professional basis. It is presupposed that the collaborators will perform their services in a cooperative manner with competence and efficiency and in full compliance with the “Code of Ethics” of the various professions.

Professional service, performed singly or in collaboration, entails exhaustive study and research in preparation for the solution of the problem and careful application of talent to sound planning and design and the highest integrity in guarding the client’s interest.

1—BASIS
The functions and the responsibilities properly inherent to the practice of architecture and engineering frequently overlap. For that reason it is difficult to establish an arbitrary and precise measure by which to determine whether a particular project should be regarded by the professions as architectural or as an engineering project. Increasingly, present day projects require the services of both professions. However, the interests of the public and of both the professions will be advanced if certain policies can be established and adhered to in the relations between the two professions. Suggestions for such policies follow.

2—ARCHITECTS
Architects should be engaged as the prime professionals for projects such as roads, bridges, locks, power plants, electrical generation, transmission and distribution, water control, water supply and distribution, sewage collection and disposal, heating and air conditioning when not a part of a major building project, factories with mechanical or electrical equipment an important feature and all

other similar projects. The architect should not seek the position of prime professional on such projects.

3—ENGINEERS
Engineers should be engaged as the prime professionals for projects such as roads, bridges, locks, power plants, electrical generation, transmission and distribution, water control, water supply and distribution, sewage collection and disposal, heating and air conditioning when not a part of a major building project, factories with mechanical or electrical equipment an important feature and all

other similar projects. The architect should not seek the position of prime professional on such projects.

4—EITHER PROFESSIONAL
There exists a third classification of projects for which the prime professional may properly be either an architect or an engineer. On such projects the construction cost of the portion of the work designed by either the architect or the engineer may represent from 40% to 60% of the construction cost of the entire project. Stadia, industrial buildings, warehouses, cold storage, and refrigerated buildings commonly fall within this classification. Either of the two professions may properly be designated prime professional on such projects.

5—USE BY EACH
The prime professional for any project shall be the member of the other profession to furnish the services in the field of that profession required by the project. Only registered members of either profession shall be called in, and their work shall bear their signatures and professional seal, subordinated to that of the prime professional.

6—FEE SCHEDULES
Each profession shall prepare a special schedule of fees that should be for the sole use of and that should be used by, the prime professional in paying for services furnished by the member of the other profession called in.

7—ADHERENCE
Adherence by the two professions to these considerations will assure the public the service to which it is entitled; it will promote good will between the professions: it will enhance the standing of both professions in public opinion, and it will promote the selection of professionals on the basis of ability to give proper service rather than on the basis of lowest price.

8—GENERAL
Nothing in the above would militate against an architect or an engineer from joining forces for the purpose of designing a building of any type in a manner and under conditions satisfactory to each of them.

(Continued on Page 10)
What's Happened to This Policy Code?
(Continued from Page 9)

fessions, could easily be the instrument to solve most, if not all, of the present difficulties. But unfortunately it does not adequately set forth one basic fact which, to many observers, is largely responsible for most current interprofessional woes.

That fact is the fundamental difference between architects and engineers. The architect is a planner, a designer, a coordinator. His training includes a familiarity with various types of engineering; and he works closely with engineering specialists to produce the various technical documents from which a building is constructed. But his function is to accept overall responsibility and his chief preoccupation is to plan for and to organize all the many and various elements of space, materials, equipment, skills and methods into an appropriate and harmonious entity. His specific concern with any of the various phases of engineering is, as rightfully designated in Florida's architectural registration law, "incidental".

On the other hand, the professional engineer is a specialist. He is trained as such; and in Florida, at least, his specialization in some particular phase of engineering is officially recognized by the Board of Engineering Examiners. Each applicant for registration is examined in one of several designated "branches" of engineering. And it is presumably upon his demonstrating competence in a certain one of these branches — The Board of Engineering Examiners lists them as mechanical, industrial, chemical, civil, electrical and mining — that he is eventually designated as a "registered professional engineer".

But his registration does not specify in what branch of the engineering profession he has demonstrated competence. And under a certain interpretation of the engineer's law in Florida, a "registered professional engineer" can undertake, at will, to engage in any type of engineering activity applying to any of the long list of categories set forth in the statute.

Thus, under this interpretation, a mechanical engineer might undertake to design a church; a chemical engineer a complicated shopping center; or an electrical engineer a house or apartment. The record shows that just such attempts have been made; and it is this open and permissive tolerance of incompetence which is the heart of current interprofessional conflicts and which constitutes a serious concern with thoughtful leaders in both professions.

They believe that the conflicts can be resolved. Certainly this can be accomplished, they say, if mutual understanding, tolerance and cooperation can be established and if present legal ambiguities can be eliminated. The Orlando meeting was at least a start toward this goal.
School Plant Economy . . .

What Does It Really Mean?

The chief difficulty in understanding the real meaning of school plant economy lies in the variety of possible interpretations of the phrase. Like the little blind boys who first "saw" an elephant through the media of groping hands, a picture of the whole creature is quite likely to be visualized in terms of the particular part touched. To the educational researcher the term means, perhaps, adaptability as a teaching tool. To a builder it may mean simply low first cost. To the average taxpayer it probably means as small a bond issue as possible and no fancy frills.

All are right so far as their outlook goes. But true economy in anything is not as simply gained as the uninformed imagine. Relative to our public schools it is a complex subject which can only be suggested here. There is no way to measure it against a complete, constant standard; for what may be true economy in one town, for one educational situation, in one space-time segment may be extravagant under different conditions elsewhere. True, there are some general, rule-of-thumb yardsticks against which certain factors of economy can be gauged. But they will necessarily vary in application to each school plant.

First cost is one. On the basis of that, Florida communities are faring extremely well as compared with the nation as a whole. A study recently completed by the State Department of Education showed that the average square-foot cost of 30 elementary schools built in Florida during the past three years was over 40 percent less than schools of comparable type throughout the nation. For Florida the figure was just under $9 per square foot while the nationwide average was somewhat above $15. Even new and complete high schools in Florida are costing less per square foot than that figure. Another recent study of 21 new Florida high schools showed a unit cost range from $8.62 to a top of $14.75 — with an average of only $10.43.

It is a superficial measurement, of course. Average square foot costs do not reflect the character of the educational values of the plant. But they do indicate that Florida communities are getting their construction money's worth — particularly so in view of the fact that during the last 20 years building costs generally have increased 210 percent, while costs of educational plants have been held to only a 130 percent increase.

As a full measure of economy, however, square foot costs can prove to be dangerous fallacies. There is a growing recognition by educators and progressive school boards that the true costs of any educational plant must realistically be measured over the useful life of the building or over the term of its financing. Regarded from this viewpoint, first, or construction cost — and the initial costs of furnishings and equipment as well — could be regarded as relatively unimportant.

The point is that maintenance, repair and replacement bulk very large indeed in the yearly operating budgets of most school boards. Plenty of research has been done to prove that taxpayers have paid heavily for the scrimping policies of many a board — which complacently barked in kudos when the now-dilapidated high school was newly dedicated. Our own State Department of Education deems this matter of maintenance cost so vital that the School Plant Administrator's office has recently instituted a department staffed by an experienced maintenance engineer whose job it is to advise on factors leading to quick deterioration and obsolescence and to suggest methods for eliminating them from both new and modernization construction.

It should not be difficult to see that this more accurate measure of plant economy may well change the picture of unit building costs. Adding ten cents per square foot to a

(Continued on Page 12)
School Plant Economy...

(Continued from Page 11)

school plant construction cost would not materially affect the initial financing of the plant — nor unduly pinch taxpayers over the term of the bonds. But that added first cost could well mean a saving in operating expenses accountable to maintenance, replacement and repair amounting to many times its total over the 20-year period of a plant's financial life.

The same general analysis is now being applied to school planning and construction techniques relative to insurance. Florida's School Plant Administrator's office has already undertaken to provide this analysis for new school plants. It complements, of course, the study now being given to maintenance factors, for often the things which dictate high insurance rates are also those which have a high incidence of maintenance cost.

Further to complicate the total picture of school plant economy is the fact that construction costs vary in different localities in the state. In one area material and labor costs may be pegged by inactivity in building which has resulted in pencil sharpening competition among builders. In another, an active construction market may have sent unit prices free-wheeling to the higher brackets. Thus, a comparison of costs in one area with those in another does not constitute realistic analysis or provide much of a guide to construction economy in either case.

The central point is that the dollar sign on any type of school plant is not exactly an imponderable. But it may not wholly mean what it seems to say unless it is carefully checked against the various other factors which can have a profound influence on it as a reliable measure of overall plant economy.

Design is, of course, still another factor that must be considered. Recently there has been much published in depreciation of "costly educational palaces". Generally speaking that is proper; and the "no frills" body of opinion stands on firm ground so far as that particular point is concerned. But sweeping generalities are dangerous. The community, not the impersonal critic, is the best judge as to what good design and top-notch facilities can contribute to stability of a neighborhood and the improvement of a civic area. On following pages is proof positive that the county of Sarasota recognizes outstanding architectural design as just as valid a factor of total school plant economy as high education value and sound construction.

Finally, true economy in school plant construction involves hiring the best technical brains available to produce the results desired. On this point, the success of the Sarasota program is merely additional proof that the cost of vigorous and imaginative talent is absurdly low — particularly in view of the corollary community values it inevitably generates. Professional fees for the new Sarasota schools totaled $238,181 — or about six and one-half percent of the $3,634,358 cost of the four-year expenditure for construction.

These Sarasota schools have proved an attraction to stable new citizens. The city has grown — and grows stronger — is a result of them. And the point is not lightly to be disregarded by any Florida community which is seeking to improve its economic position and to enhance its facilities for sound and prosperous growth. In Sarasota, good architecture — with the full professional service that the term implies — has proved anything but costly. It has already provided the city with an educational plant which has proved envy at the national level. Were it possible to measure the expenditures for architectural service on the Sarasota schools against the community values which that service has stabilized and enhanced, it would undoubtedly be demonstrated that through architecture, Sarasota citizens have purchased community improvement, increased population and a broadened tax base at a ridiculously small price.

Among these Sarasota schools is a high school plant that is among the most expensive, on a square foot cost basis, in the state. There is, also an elementary school which rates in the lowest cost brackets. But each is delivering its determined value to economic and cultural development of the city. This, too, is a measure of school plant economy. In other communities the product-result may be different. But the tangible and intangible yardsticks used in Sarasota can be applied with equal success in, by, and for any community in the State. — Roger W. Sherman

THE FLORIDA ARCHITECT
It CAN Happen Here . . .

By PHILIP H. HISS
Chairman, Sarasota County Board of Public Instruction

The primary objective of the Sarasota County Board of Public Instruction has been to provide the best possible learning environment within reasonable limits imposed by the ability of this community to pay. These limits will not be the same in any two counties, and, in fact, the best possible curriculum also will differ greatly from community to community. Many factors enter into this: average wealth, the general level of education among the adults, whether the community be agricultural, industrial, or of another type. Many factors also enter into building costs in different areas such as wages, availability of materials, freight charges, level of skill of local workmen, the experience of architects and engineers, and many others.

What is indisputable is that the most economical school building is one which combines moderate first cost with low maintenance costs. In other words, “lowest first cost” or “cheap” schools are a hoax on the taxpayers. There is nothing so expensive in the long run as a “cheap” school. In most cases, it is the “gutless” approach to school building: one where the present Board shifts the day of reckoning to another Board at another time.

The taxpayer should be interested first of all in what the school plant does to further education. But even if self-interest directs his attention only to his pocketbook, this same self-interest should cause him to fight to the end for schools which will cost the least over the useful life of the building.

A footnote here is in order: In a day when both technological progress and educational progress are so rapid, schools no longer should be built to last a hundred years. But it is equally unrealistic to meet the problems of 1959 with the techniques of 1900, since this results in buildings which often are obsolete before they are finished. One does not have to look far to find new schools of such shoddy workmanship and materials that they would fare badly indeed if they had to be financed in the ordinary way; yet they are found acceptable when the taxpayer foots the bill.

Why should each school be of original design? Because every school site is different. Because even the climate varies widely from the north of Florida to the south and from the coast to the interior. Because every county (in fact each community in each county) faces different problems of population composition, of education and wealth, of what each expects of its children. Because costs of materials and services vary from community to community. Because schools are not built in a vacuum, but play a part in an existing social structure and act on it as well as being acted upon. Because each community has the right, indeed the responsibility, to do what is best for its own children, and to maintain its own individuality.

We still express lip service to the democratic ideal of individualism, yet the trend toward mass conformity becomes greater every day. There already are far too many factors contributing to mass conformity in our civilization without making assemblyline education one of them. Furthermore, no one yet has designed the perfect school. And, according to Dr. James Bryant Conant, even if we had been able to accomplish this, the same de

(Continued on Page 11)
It CAN Happen Here...  
(Continued from Page 13)

design would not be "perfect" for any other school.

Another footnote: The best architect in the country costs no more than the worst or the least experienced. Schools, like it or not, are an important environmental factor in the growth of children. Esthetics — the development of taste in a child — should not be ignored, though it often is.

Douglas Haskell, editor of Architectural Forum, put his finger on one reason why more good schools have not been built: Most school boards, whose members serve with little or no compensation, and who number very few experts on building or architecture among their members, are unwilling to take on themselves the difficult and time-consuming public relations job entailed in "selling" anything new — be it a change in curriculum or one in the type of building being erected. And too few architects have been anxious to solve the multitudinous problems of new types of construction when they could draw from memory the details of fifty years ago. But progress can only be bought at the expense of hard work — hard work on the part of school boards, hard work on the part of school administrators, and hard work on the part of architects.

To summarize: School architecture must be tied to an educational program, but proper buildings themselves can open new horizons in education. The new Sarasota schools unquestionably attract both students and teachers: They invite rather than repel. Attendance figures improved substantially in one school when it moved into new buildings.

These schools are very moderate in first cost, provide far more than the minimum requirements, and are easy to maintain — surfaces like glass, tile, aluminum can be wiped clean rather than requiring repainting; do not crack as easily as ordinary block structures. Students take more pride in these buildings, and there is less vandalism. Greater flexibility is built into these new structures, and new uses are being found that were not possible in old-type classrooms. Consequently the buildings have influenced the curriculum by making more things possible.

Lastly, such schools as we recently have built in Sarasota attract new and substantial people to the community who, in turn, bring new vitality and strength and progress.

<table>
<thead>
<tr>
<th>School</th>
<th>Building Construction Cost ($)</th>
<th>Floor Area (sq. ft.)</th>
<th>Gross Pupil Capacity</th>
<th>Pupil Station Capacity</th>
<th>Gross Area Cost ($ per sq. ft.)</th>
<th>Cost per Pupil ($)</th>
<th>Cost per Pupil Station ($)</th>
<th>Design Efficiency (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brookside</td>
<td>494,153.00</td>
<td>56,262</td>
<td>486</td>
<td>781</td>
<td>8.80</td>
<td>1,020.00</td>
<td>630.00</td>
<td>71</td>
</tr>
<tr>
<td>2. Alta Vista Elementary</td>
<td>154,068.00</td>
<td>18,416</td>
<td>224</td>
<td>324</td>
<td>8.40</td>
<td>476.00</td>
<td>476.00</td>
<td>71</td>
</tr>
<tr>
<td>3. Riverview High</td>
<td>1,070,898.00</td>
<td>92,093</td>
<td>594</td>
<td>1109</td>
<td>11.60</td>
<td>1,805.00</td>
<td>965.00</td>
<td>72</td>
</tr>
<tr>
<td>4. Fruitville Elementary</td>
<td>185,441.00</td>
<td>15,308</td>
<td>227</td>
<td>297</td>
<td>12.00</td>
<td>618.00</td>
<td>618.00</td>
<td>78</td>
</tr>
<tr>
<td>5. Englewood Elementary</td>
<td>2,711,899.00</td>
<td>22,103</td>
<td>243</td>
<td>243</td>
<td>12.30</td>
<td>1,119.00</td>
<td>1,119.00</td>
<td>58</td>
</tr>
<tr>
<td>6. Booker Elementary</td>
<td>454,714.00</td>
<td>61,480</td>
<td>648</td>
<td>753</td>
<td>7.40</td>
<td>700.00</td>
<td>600.00</td>
<td>57</td>
</tr>
<tr>
<td>7. Brentwood Elementary</td>
<td>594,735.00</td>
<td>70,547</td>
<td>648</td>
<td>708</td>
<td>8.40</td>
<td>918.00</td>
<td>740.00</td>
<td>53</td>
</tr>
<tr>
<td>8. Venice Junior High</td>
<td>408,458.00</td>
<td>37,380</td>
<td>297</td>
<td>512</td>
<td>11.00</td>
<td>1,375.00</td>
<td>800.00</td>
<td>70</td>
</tr>
</tbody>
</table>

NOTES:
1. ...Exclusive of professional fees or costs of site development and equipment.
2. ...Covers total square foot area. As figured by the Sarasota School Board, this includes developed basement areas and stairways at full sq. ft. value: covered play areas, porches, sheltered platforms, passages and like areas at one-half sq. ft. value.
3. ...Rated capacity of regular classrooms, excluding special-purpose classrooms. The Sarasota School Board assigns a capacity of 27 pupils to each classroom, regardless of classroom size.
4. ...Rating used to aid in comparisons of various schools relative to educational effectiveness. Spaces other than regular classrooms (with a 27-pupil capacity) are rated for pupil capacity thus: Science Laboratories: 25; Commercial Education: 25; Home Economics: 25; Shops: 20; Art: 25; Band or Chorus Rooms: 35; Study Halls or general education laboratories: 35; Gyms or Playrooms: 35; Gyms or Playrooms with partition: 70; Swimming Pools: 25; Kindergarten (double session): 40.
5. ...As used by the Sarasota School Board this rating indicates the ratio of net educational area to total gross area. Since outdoor classrooms and similar areas are included in gross area calculations, ratings for schools embodying such spaces tend to be in a percentage scale lower than schools without them.
1-Brookside Junior High School, Sarasota

The success of this school, bid at $45,000 under its budget and built in 1955, gave the green light to Sarasota County's current building program, of which eight completed units are presented here. Ralph & William Zimmerman, AIA, were the architects for the clustered Brookside buildings.

This complete departure from the design of Sarasota schools existing at the time Brookside was proposed resulted from an intensive study of then-existing school layouts, education facilities, construction and equipment. Brookside set a new pattern of orientation, of planned space relationships, of construction and design character. Its low unit construction cost—$6.80 per square foot—resulted from imaginative use of high quality but inexpensive materials. All classrooms are framed with identical steel bents, exterior end walls are heavy gauge ribbed aluminum sheet. Classrooms have large window areas combining fixed sash with jalousies for control of ventilation. Eight-foot overhangs shade all window areas to cut interior glare.

APRIL, 1959
2-Alta Vista Elementary School Addition, Sarasota

This 12-room addition to an existing plant stands entirely free of the old building and is the most radically "different" of all Sarasota's eight new school plants. Victor A. Lundy, AIA, was the architect.

Classrooms, each with an outside teaching area reached by sliding glass doors, are ranged on both sides of a glass-roofed corridor. The roof is framed with glued-laminated bents 14-foot on centers and sheathed with 3 by 5 double t-and-g fir decking exposed as a ceiling. Cast brick masonry partitions are kept at door height and surmounted by fixed sash to provide an effect of soaring lightness and an 18-foot overhang shelter for the outdoor classroom areas. Square foot cost was held to $8.40.

APRIL, 1959
3-Riverview High School, Sarasota

The only two-story plant in Sarasota's newly-completed program, this school embodies facilities for a complete secondary educational program. The architect was Paul M. Rudolph, AIA.
Classrooms on both floors of this steel-framed, glass, cast brick and cement slab building are reached from outside corridors ranged along two sides of a central court. Corridors are protected and classroom windows shaded by a series of pre-cast concrete slabs set at alternate heights to permit free passage of air. A series of skylights like small pent houses admit light and air to walkways between the double row of special activity classrooms and provide top-lighting and ventilation in the gym, library and cafeteria. Construction cost per square foot was $11.60.

Above, the auditorium, at right the library which suggests how the overhead skylights are effective in creating a decorative pattern as they serve a practical purpose.
4-Fruitville Elementary School Addition

The first of what is planned as a two-stage expansion of an existing school which will be retained and joined to the additions by covered passages. Bolton McBryde, AIA and the firm of West and Waters, AIA, were associated as architects.

Small-scaled in harmony with its small-size pupils, the classrooms are oriented north and south for light control and are framed with a series of steel bents. Walls are concrete brick, floors terrazzo — with other materials selected to provide as maintenance-proof a structure as possible. Unit cost was $12.10 per square foot.
5-Englewood Elementary School

Eventually new units will supplant the old school shown in the air view below and have been planned on the basis of an experimental teaching program under which classes are not organized in conventional grades but into various combinations which are handled by teacher teams. Bolton McBryde, AIA, and the firm of West and Waters, AIA, were associated as architects.

In general layout classrooms are similar to those of the Fruitville school as is the overall design character. Construction details and materials also follow closely the pattern of the Fruitville plan. Ultimate development of this school will embody four classroom "nests" of nine classrooms, the dining-assembly hall — the diamond-shaped building in the air view — and a centrally located playroom, administration unit and experimental education studio. Square foot cost was $12.30.

APRIL, 1959
6-Booker Elementary School, Sarasota

Embodying many of the principles developed in the successful Brookside school, this 648-pupil plant was designed by Ralph & William Zimmerman, AIA, architects.

The open, but somewhat formal plan includes four "school villages" of six classrooms and a court grouped symmetrically about a large central open area flanked by an administration building at one end and a commons building at the other, this containing such facilities as cafeteria, music room and library. Unit cost was $7.40 per square foot.
7-Brentwood Elementary School, Sarasota

Classroom wings of this 24-unit school are linked by covered walkways. Gene Leedy was the architect, William Rupp, AIA, the associate architect.

Basic element of this spacious school is a double, indoor-outdoor classroom unit with a utility core containing residential type forced air heating to serve both rooms. Classrooms are glass-walled on each side, but are shaded by eight-foot roof overhangs. The entire school was built on a raised platform of fill confined by retaining walls to overcome drainage problems created by the low-elevation site. Square foot cost was $8.40.
8-Venice Junior High School

Part of what will ultimately be a large educational complex, including athletic and recreational facilities to serve a near-by high school as well as junior grade pupils. Mark Hampton, AIA, architect; John M. Crowell, AIA, associate architect.

Structure is reinforced concrete; walls partly stuccoed concrete block, partly a curtain type, glazed in some areas and fitted with insulated panels elsewhere. Interior partitions are framed with steel studs to which chalkboard or perforated hardboard panels are bolted. Most floors are vinyl-asbestos; and ceilings of classrooms have been sprayed with acoustical asbestos. Unit cost was $11 per square foot.
NWMA Door Guarantee Revised for ‘59

All doors produced by members of the National Woodwork Manufacturers Association, Inc., are guaranteed by the manufacturer for one year from date of shipment by the manufacturer to be of good material and workmanship, free from defects which render them unserviceable or unfit for the use for which they were manufactured. Natural variations in the color or texture of the wood are not to be considered as defects.

Doors must be accorded reasonable treatment by the purchaser. Doors must be stored or hung in dry buildings and never in damp, moist or freshly plastered areas. Doors must not be subjected to abnormal heat, dryness or humidity. The utility or structural strength of the door must not be impaired in the fitting of the door, the application of hardware, or cutting and altering the door for lights, louveres, panel doors and any other special details. When solid core and hollow core flush doors are cut for lights or louvers, the portion between the cut out area and the edge of the door shall not be less than 5 inches wide at any point; and the cut out area shall not exceed 40% of the area of the face of the door; and in addition the cut out area of a hollow core door shall not exceed half the height of the door and shall be suitably prepared. Immediately after fitting, the entire door including top and bottom edges must receive two coats of paint, varnish or sealer to prevent undue absorption of moisture. The manufacturer will not assume responsibility for doors which become defective because of failure to follow these recommendations or for hazards of shipment or storage after the doors leave the control of the manufacturer.

Doors must be inspected upon arrival for visible defects and all claims or complaints based thereon must be filed immediately and before the doors are hung and before the first coat of paint's finish is applied.

The manufacturer agrees to repair or replace in the white, unfitted, and without charge, any door found to be defective within the meaning of this guarantee.

Doors must not be repaired or replaced without first obtaining the consent of the manufacturer.

A warp or twist of not to exceed ¼ inch shall not be considered a defect.

INTERPRETATION OF WARP OR TWIST

“A warp or twist of not to exceed ¼ inch shall not be considered a defect.” This refers to any distortion in the door itself and not its relationship to the frame or jamb in which it is hung. Therefore, a warp or twist exceeding ¼ inch shall be considered a defect only:

1. When warp is determined by applying a straight edge to the concave face of the door, or
2. When twist is determined by placing the face of the door against a true plane surface. A simple device to determine and measure “twist” may be made by placing two cross-members on a post, one about door height and the other slightly above the floor. The cross-members must be perfectly straight, and true and plumbed into perfect alignment.

The guarantee against warp or twist does not apply to the following:

a. 1¼" or thicker doors that are wider than 5’6" or higher than 8’0”.

b. 1½” and 1¾” thick doors that are wider than 3’0” or higher than 7’0”.

c. Doors with face veneer of different species.

d. Doors that are improperly hung or do not swing freely.

IMPORTANT NOTE:
The NWMA Standard Door Guarantee applies only to Ponderosa Pine and Hardwood Veneered Doors manufactured by members of the National Woodwork Manufacturers Association. It has, however, become accepted as a minimum standard by the construction industry. Door guarantees of some manufacturers substantially exceed the NWMA Standard Guarantee. For example, that covering IFIK Solid Core DOORS exceeds this Standard as to both time and size limitations. The Guarantee on IFIK DOORS extends for a two-year period and covers all sizes up to four by ten feet in a one and three-quarters inch thickness, but otherwise embodies all the contingent provisions of the NWMA Standard Door Guarantee printed here. This NWMA document was revised in October, 1958, and is reproduced here as a convenient and ready reference for architects and specification writers.
The President’s Message

By JOHN STETSON

President
Florida Association of Architects

One of the aims of the Florida Association of Architects this year is the establishment of workshops for the membership. Most of us have, from time to time, been satiated by a lot of drivel handed out at seminars and workshops held in conjunction with conventions. We have seen men thoroughly familiar with their subject matter, but incapable of doing a respectable job of presenting it to their audience. Most of us are guilty of the same thing. We, through education and training, know our subject; but our clients remain very much uninformed and at times wind up thinking of an architect as somewhat charming, if confusing, character.

We hope, through our workshops, that we can take a good look at ourselves as others see us and improve what might now be classified as a mirage. We hope to present ways and means of reducing office overhead, yet evolve a better organized and smoother functioning practice. Our first workshop, to be held in Gainesville in April, will be aimed at better public relations. We have asked the A.I.A. Public Relations experts to present a program for the individual, rather than the profession as a whole. Then in early July, in Palm Beach, we want to hold a real, two day “get down to the facts” session on office practice.

Bob Denny of Henry J. Kaufman & Associates, the A.I.A. Public Relations firm, has assured us that our April workshop will be aimed at the small practitioner. Although it is customary in the A.I.A. to ascend and descend via the vertical committee structure, this one time we would like to see the individual given an opportunity to participate and to learn as an individual. Therefore it has been S.O.P. for information to be disseminated from the top to the individual by calling the top dogs together and giving them the word. They, in turn, were supposed to pass this along down the line, and finally, about third hand, it was presented to the individual at a chapter meeting. It is my opinion that most architects won’t listen to another architect. Rightfully or not, this is a common fault among professional men. If a man is successful, then there is the matter of professional jealousy. If he isn’t, then everyone asks, “How come he speaketh with authority?”

The small practitioner has his hands full just making a living; keeping the client happy and the contractor off his neck. Every mail brings manufacturer’s literature, architectural magazines, dun letters from charitable organizations, bills, more bills, and an occasional copy of playboy. Most, excepting the last mentioned, get the “file thirteenth” treatment. A great deal of the advertising issued by the building products manufacturers is wasted. Most products vary little from year to year, and advertising agencies, to justify their existence, in many cases pour out tons of pulp each year, mailing it to practitioners who just plain wish they wouldn’t. Rather than appear partial, the recipient chuck the whole lot. So many new and noteworthy products go unnoticed. The tired old man of the profession wakes up one morning to find that the job across the street, being designed by that young, upstart architect operating from a back room, has some entirely new materials and products incorporated. He can’t understand it. What happened? The young pencil pusher, given more spare time, reads his mail and uses a little of what is presented.

This is just one of the many ways we can expedite our professional approach. I predict that in years to come we will have regularly scheduled meetings and condensed bulletins, already in the mail, which will enable us to keep abreast with new developments. We will learn new techniques as they are developed, just as the medical profession does now. As the country doctor, is content to abide by those things he learned many years ago, so will the country architect be content to go on designing buildings in the same manner and using the same construction techniques that he did thirty years ago. In this age of specialization, it is increasingly more difficult for the small practitioner to keep up with the large organization. Here is where a really well developed workshop program can do wonders. By such a program we can actually condense a lot of knowledge and new techniques into a very short period, thereby in effect giving the small office several additional employees.

The profession has gone a long way in the field of public relations since the turn of the century. How much further it goes will depend on the individual practicing architect. The Institute has spent good, hard cash employing experts to tell us what is wrong with us, and to demonstrate how we can correct these faults. In spite of this, I’d bet plenty that the majority of our members can’t list

THE FLORIDA ARCHITECT
three things accomplished by the last two public relations firms hired by the A.I.A. The next step, and a big one, is to convince you individually that yours is a large role in this job to be done. One poor example of our profession, preying on the public, can do more harm than you think. Everyone of us should remember this. The very best way for us to better our individual lot is to see that the profession as a whole reaches the highest plane attainable. The most perfect machine can fail to function if one simple part fails to perform.

In the matter of office practice there is much to be learned by studying the techniques employed by others. Each of us has some trick useful to all. Professional jealousy decrees that these ideas shall remain the property of the inventor, carefully hidden and saved for the opportune time for use on the proper client. As a result we are thought of as a group of chronic individualists, disorganized in our thinking and doing. I keep harping on the medical and legal professions, but let’s compare for the moment. Suppose that every man in the field of medicine had kept his discoveries to himself, to be used just for his individual gain? Do you think less of your doctor because he wasn’t the one who discovered a particular operational technique? Do you think he is only a copier because the pill he prescribes was first mixed by another? Did you ever stop to think that most great trial lawyers have copied the techniques of many?

Many of you have asked for workshops where ideas can be traded, and new ones developed. Our first, in Gainesville, will give you ample opportunity to show your interest or lack of it. Many of you will alibi that you don’t have the time. If you don’t, you aren’t interested in improving your lot or your professional knowledge. You are content for the profession and yourself to remain in a second rate position in the United States, while in every other country in the world, architecture is the outstanding and most revered profession. Your officers continually hear the outcry from disgruntled members, “Why don’t you and the Association do something for the poor, little, misunderstood practitioner?” Okay, let’s go. If you don’t show up we’ll understand, but will the rest of the building industry or our clients or the public?

FLORILITE Perlite
It Can
Fireproof
Children...

- In schools — where only the highest safety factor is good enough — Perlite Fireproofing Plaster can literally surround children with protection. As a guarding coat for structural steel, as a double-duty finish for walls and ceilings and as part of fire-retardant construction of roof decks and interior partitions the heat-barring properties of Perlite work to solve any fireproofing problem anywhere.

- Such positive safety is easy to provide. Perlite Fireproofing Plaster can be used under any design condition. A whole range of tested constructions permit a wide choice of details to produce safety ratings up to 4 hours for walls and ceilings and up to 5 hours for structural steel. You can find complete technical information in Section 5 of your Perlite Design Manual.

- In addition... Perlite concrete is lightweight — about one-fifth the weight of standard concrete. So its use makes possible construction economies, too — thus still further reducing the cost of using one of the most versatile and effective materials in building...

PERLITE INCORPORATED
1050 S.E. 5th St., Hialeah—TU 8-8791

APRIL, 1959
What John Simmons did for his family

John Simmons, 3058 John Anderson Dr., Ormond Beach, did something important for his wife and son John, above. His granddaughter, Sandra Shreves (on Mrs. Simmons' lap in the picture) got in on the dividends, too. Let Mr. Simmons tell you about it:

“When designing our new home, we decided that central fuel-type heating was a 'must'; and during the extremely cold weather winter before last we were thankful for the comfort it provided. We had even temperatures in all the rooms. Our guests enjoyed their visits with us in comfort. No more closed-off rooms and shivering from inadequate heat for us in cold-snap weather!”

Mr. Architect: Sure, Florida enjoyed “summer” weather this past winter. But Floridians haven’t forgotten the chills and ills of 1957-58 and other recent winter seasons. And we’ll be reminding new residents that over the past 35 years Florida homes have needed heat an average of 42 days a year—even in South Florida. We believe your clients are “sold” on the low cost, economical operation and superior efficiency of fuel-type home heating; and that they will accept your specification of permanent fuel-type heating with enthusiasm. Please call on us for any information you may need on central home heating.

Florida Home Heating Institute
1827 S. W. 8th Street, Miami
THE FLORIDA ARCHITECT
Match Flooring Materials To Service Conditions

The author of this article, P. W. CLOYES, is the manager of the building contract department of Selby, Battersby and Company, of Philadelphia, and as such is a qualified expert on maintenance factors involved in the selection of many building materials. His pertinent comments on the choice of flooring materials first appeared in a late 1958 issue of Better Building Maintenance. It is reprinted here with grateful appreciation to that magazine.

Whenever a new building is being designed, or an old building is being rehabilitated, the selection of the proper flooring for each area is of prime importance to the owner's best interests. This is particularly true with institutional buildings, because reliability of material and cost of the flooring and its maintenance and repair are the two most important factors to be kept in the minds of the planners.

A reputable general flooring contractor — experienced in laying all types of flooring — can be of great assistance to architects, engineers, general contractors and managers of hospitals and institutions in evaluating floorings as to their suitability for the respective areas to be covered. Such a contractor knows, or should know, more about the subject than anybody else. Contractors who are opportunists, or who lay only one type of flooring, do not fit into the picture because their experience is not broad enough.

Purchasing on Cost

Too often, I am sorry to say, floors are purchased on price alone and unfortunately the low installations cost is the determining factor as to what type floor should be used. This is the wrong way to cope with a problem as big as institutional flooring. What else in an institution is subjected to the use and abuse that floors are? Actually the only way to determine the true cost of a floor should be the cost per square foot, including maintenance over the years of use. No flooring is cheap if it does not do the job.

There is no cure all for flooring problems. By that I mean no one floor will meet all service conditions. A particular floor will perform well under certain conditions and fail miserably under others. I think we should recognize this at the start. That is why it is necessary for the architect and the flooring contractor to operate in close harmony, not unlike the physician and surgeon, for without proper diagnosis of the problem the treatment will not effect a cure.

Let's look at some of the floors we see in institutions throughout the country eliminating, of course, both wood and concrete. You will find that predominantly they will be cement terrazzo, quarry tile, ceramic tile, some conductive floors in hospital suites, a lot of resilient floors, such as asphalt, linoleum, vinyl, rubber and cork and then, too, there will be some composition floors (troweled).

Cement Terrazzo

First let us talk about Portland cement terrazzo. We all know what this floor looks like — marble chips of various colors embedded in a cement matrix. Very little history has been written on terrazzo. Actually it owes its wide usage today to the ageless mosaic work done by the early Venetians. Here is one floor that has withstood the test of time over the centuries, and has proven its worth. Surely no one can dispute this fact.

In our opinion, for corridors or areas receiving hard traffic, cement terrazzo offers the best floor for the least money per square foot over the years, including maintenance. Please note, however, that terrazzo is not recommended for floors under soup kettles in kitchens, or in areas subjected to acids or strong alkaline concentrations. To use a good material such as terrazzo under these conditions would be a fallacy.

Here it would be wise to use quarry tile or packing house brick with an acid-resistant joint. The acid resistant joint is most important, for I know you have all seen quarry tile floors where the tile has been installed for a few years and is in excellent condition, but the joints have completely eroded and act as dirt catchers and a breeding place for bacteria. These joints, being sand and cement, are attacked by the acids and alkalies in the food and fruit juices. This causes them to deteriorate, which makes the floor impractical for the very purpose for which it was purchased. A little forethought, and the use of an acid resisting grout, could have prevented this. It is certainly more expensive to repair conditions such as these than it is to spend a few extra pennies necessary to eliminate them.

Let us just dwell on this item of cost for a moment. Some of the problems faced today in institutions can be traced back to the original design of the building itself. A given amount of money was appropriated to build a building. Because of the fact that an architect must remain within a budget, one of the first items to suffer is the flooring. Where you planned to have terrazzo or ceramic tile you get asphalt tile; where you planned to use quarry with an acid-resistant joint you get a grease-proof asphalt tile. No material can be expected to do the job that it was not designed to do and it is false economy to buy the cheapest floor on the basis of the initial cost.

(Continued on Page 20)
Flooring...

(Continued from Page 29)

Next we come to the troweled or composition type floor. Basically they are the asphalt type, the mineral type such as oxchloride or magnesite and the latices.

Asphalt Type: The asphalt types are usually sand, cement and asphalt emulsion. Sometimes heavier aggregates are included. These floors are oftentimes used as covering in loading docks and platforms and interiors where water lays on the floor. One disadvantage of this type of floor covering is that it is affected by temperature changes. In hot weather it has a tendency to soften and dent.

Mineral Composition: The mineral composition, such as magnesite or oxchloride, lends itself particularly well in the renovation of old construction. This type of flooring is often used where there is an uneven wood floor. Application is accomplished by securely nailing all loose boards and then laying 15lb. saturated felt. Over this lath is nailed and upon the lath magnesite is travelled to the thickness desired, which should never be more than ½ in. in finished floors. This type of installation will actually lend structural strength to the existing floor, and effects a savings in maintenance costs since it is completely monolithic. This type of flooring should never be used when subjected to water lying continuously on its surface, although intermittent wettings are helpful.

It is fire resistant, vermin-proof and impervious to most oils and greases. It lends itself very well as an underlayment to the various resilient floors because it does not just bridge the sub-floor but rather it fills the gaps and levels the floor at the same time. When applied over concrete, the bond to the concrete is accomplished by either roughing the concrete or by the application of a latex bonding agent.

Latex Type: Recently, certain types of resin latex flooring have begun to make their mark in the flooring field and bring promise of great things to come. One interesting feature is the fact that these floors are laid exceptionally thin—approximately ½ in. thick—and wear tests indicate tremendous resistance to abrasion. Tests conducted for performance under certain acids and alkalines—urea, gasoline, etc.—indicate there are great opportunities for its use in both the industrial and marine field.

The Army and Navy both are specifying considerable magnesite and latex in flooring of barracks of the various camps, while the resin latex is being used in latrines.

Resilient Floors

Now for the resilient floors, such as asphalt, rubber, vinyl, cork and linoleum. Each has its place, but remember none of these floors are any better than their underlayment and none should be installed to correct uneven appearances of wood or concrete floors. For, by their very nature, they will follow the contour of the floor below.

Another thing to remember is that while the flooring itself may resist water, oils or detergents, will the ad-

CLEAR PANEL
AN EXCITING NEW IDEA IN ROOF CONSTRUCTION

For rich, glowing beauty combined with strength and economy, try Unit CLEAR • PANEL Deck! Solid 1" x 6" or 3" x 6" sections with permanently bonded clear, knot-free natural Oak or Birch facing. CLEAR • PANEL Deck placed directly over Unit glued laminated beams eliminates purlins, joists, sheathing, bridging, etc., makes ceiling tile, plaster acoustical and insulating materials obsolete.

SALES OFFICE

WALTER & JOHNSON
430 Kanuga Drive
P. O. Box 710
West Palm Beach, Florida
Telephone: TEmple 2-4956
Conductive Floors

Another problem in institutions today is the need for conductive floors in operating suites. As a rule, the majority of institutions today are either without conductive floors in their operating suites or have floors whose conductivity does not meet the standards set up by the N.F.P.A.

The United States Bureau of Mines has a bulletin on static electricity in hospital operating rooms. The bulletin is No. 520. Unfortunately the subject of conductive flooring is not widely understood. However, one of the most important safety measures to contain this danger is a conductive floor which will comply with the safety standards of the National Fire Protection Association Bulletin No. 56. Briefly these requirements are that a conductive floor should have a resistance of between 25,000 ohms and 1,000,000 ohms.

Conductive floors should be installed in all operating and delivery rooms and where combustible anesthetics are administered. Many explosions have occurred in the past because it is possible to generate enough static electricity to cause a spark simply by pulling a sheet back off a patient. That is why conductive floors are an important factor.

Maintenance Costs Keep Rising

No matter what flooring is installed, the cost of maintenance is a pertinent factor. It is almost like getting married — The first cost is negligible, it is the upkeep that counts. Below are some figures that may be surprising to those who don’t know what it costs to keep floors clean. These figures, contained in the Office Building Experience Exchange Report, show the average cost per year to maintain floors in office buildings. The figures given are in cents per square foot of rented area:

In 1924 in 170 buildings a total of 18,017,355 s.f. cost 21.4 per s.f. to maintain.

In 1950 in 577 buildings a total of 76,198,830 s.f. cost 39.2 per s.f. to maintain.

In 1951 in 571 buildings a total of 74,052,655 s.f. cost 46.1 per s.f. to maintain.

In 1954 in 600 buildings a total of 77,079,898 s.f. cost 47.1 per s.f. to maintain.

In 1955 in 624 buildings a total of 83,246,374 s.f. cost 47.8 per s.f. to maintain.

In 1956 the average cost of maintaining a square foot of rented flooring jumped to 48.9 per square foot.

In the Philadelphia area alone last year, depreciation costs per square foot of rented buildings was 56.1; cleaning 55.6; taxes 25.7. Thus, maintenance is an awfully important part of the cost of flooring.

It is wishful thinking to select flooring solely on the basis of initial cost. In maintenance, the major cost is labor so that any floor that cuts down on maintenance cost saves a huge item in labor alone. The only sure way to solve a flooring problem is to consult with an architect and a re-

(Continued on Page 35)
Custom-Cast Plaques

We can fill your design needs for any type, size or shape of cast bronze or aluminum plaques, name panels or decorative bas-reliefs.

FLORIDA FOUNDRY & PATTERN WORKS
3737 N. W. 43rd St., Miami

**News & Notes**

**Reminder for April...**

During four days starting April 23, students at U/F will conduct their fifth Annual Home Show and Architectural Exposition. This will be held in Westmorland Estates, west of the Gainesville city limits, and will include not only the Exposition shelter, but a completely equipped and furnished 3-bedroom and 2-bath model house, designed by architectural students and built under the direction of the Student Contractors and Builders Association. After the Home Show the house will be sold, profits from the operation to be used for University scholarship purposes. Landscaping of the model house will be done by landscape architecture students. Furnishings and decor will be designed and executed by Interior Design students.

Lowell Lotspeich is 1959 president of the Student Chapter, FAA-AIA which has been the prime mover of the Exposition. Donald Singer has acted for the Chapter as Home Show Coordinator. Publicity is being handled by Thomas F. Bridges. Frank Schmidt and Russ Miaardi are in charge of commercial exhibits and social activities respectively. Practicing architects throughout the state are being invited to attend the four-day Exposition.

April 10 and 11 are the dates of the Florida Community Junior College Facilities Conference which will be held in the Florida Union Building. Registration fee is $5.00; and full information relative to the program can be obtained from Mr. W. W. Young, General Extension Division of Florida, Gainesville. The Conference, which is jointly sponsored by the FAA, the U/F College of Architecture and Fine Arts and the State Department of Education, has been planned to include several informal group discussions involving audience participation.

**During the 1959 session of the Florida Legislature—60 calendar days from April 7—the FAA Executive Director will be in Tallahassee on his second legislative assignment as FAA's representative. His address will be The Floridan Hotel; and all FAA members are urged to contact him there at any time relative to any facet of the FAA's program.**

During his absence, FAA affairs at the Dupont Plaza Center office in Miami will be handled by the FAA's Administrative Secretary. She will be in complete charge of the office operation. All matters relating to the Florida Architect and FAA administrative activities should be addressed to her attention at 302 Dupont Plaza Center, Miami 32.
participation as well as panel discussions and addresses by specialists.

FAA members will be welcome also to attend the two-day Public Relations Workshop scheduled for April 23 and 24 at the University of Florida. This is the first of a new FAA plan for conducting workshops or seminars prior to FAA Board meetings. The P/R meeting will be conducted by Robert E. Denney, AIA public relations counsel.

New Rating Standards for Air Conditioning

A new certification program for air conditioning units has been announced by the Air Conditioning and Refrigeration Institute. The program, sponsored jointly by the ARI and the National Warm Air Heating and Air Conditioning Association, will coordinate research, manufacturing and installation techniques in setting up standards of quality and good practice. Based on tests to establish conformity of equipment to these standards, certification, through means of the seal shown above, will be issued to makers of various types of air-conditioning units.

As indicating adherence to a series of technical standards, the ARI Certification Program should provide both specifiers and users of air-conditioning equipment a reliable basis for choice and acceptance. ARI has already issued one directory of certified unitary air-conditioners covering equipment of 33 leading manufacturers. Others will be issued as the program progresses.

Address Change

JAMES A. STRIPLING, AIA, announces a change of office address to 308 East Park Avenue, Tallahassee.

BEHIND THIS DOOR

AND ALL Thompson doors stand the guarantee that the finest materials and workmanship have been employed in the manufacturing of a quality product.

Thompson flush doors, in beautiful figured gum, lauan ash and birch can be specified for both exteriors and interiors in both standard and special sizes.

7-PLY CONSTRUCTION

Lightweight, but sturdy, Thompson flush doors are noted for their rigidity and resistance to warping and twisting. This quality is the result of high manufacturing standards that include: cores of wood ribs spaced 4-inches apart and butted against stiles on alternate sides to provide continuous vent space; stiles of a 1 1/8-inch minimum width; rails of a minimum 2 1/2-inch width; panels of 3-ply, cross-banded plywood, hardwood faced; and lock-blocks 4-inches wide. 20-inches long centered on both sides. Only non-shrinking, craze-resistant adhesives are used to produce integrated bonding that is highly resistant to both moisture and mildew.

In addition to 11 standard sizes—1/6 x 6/8 to 3/0 x 6/8 interior and 2/6 x 6/8 to 3/0 x 7/0 exterior—Thompson flush doors are obtainable in special sizes.

DISTRIBUTED IN FLORIDA BY:

A. H. RAMSEY AND SONS, INC.
516 N. W. 11th Street
Miami, Florida
915-3-2011

HUTTIG SASH & DOOR COMPANY
1000 N. W. 33rd Street
Miami, Florida
915-2-031

RODDIS COMPANY
331 N. E. 2nd Street
Miami, Florida
915-9-903

U. S. PLYWOOD CORP.
335 N. W. 31st Street
Miami, Florida
915-4-543

A. H. RAMSEY AND SONS, INC.
905 - 8th Avenue
Naples, Florida
2-1011

JACKSONVILLE SASH & DOOR CO.
1710 Evergreen Avenue
Jacksonville, Florida
915-9-840

APRIL, 1959
STOP TERMITES DEAD...and
SEAL OUT MOISTURE with
Especially for Schools with Slab-Fill Construction

BIRD

TERMIBAR*TM

One easily-installed product now can solve two of Florida's most pressing construction problems... BIRD TERMIBAR actually kills wet-wood termites while acting as an effective vapor barrier. It's a membrane combining a 4 mil film of polyethylene plastic with a layer of felt impregnated with Dieldrin, one of the most lethal and stable insecticides known. ... The plastic keeps moisture out; the Dieldrin kills the bugs — and TERMIBAR meets U.S. Govt. specs on both important counts. For complete termite protection specify that TERMIBAR CAULK be used to seal all openings around pipes and structural members... Full data on how to use and specify TERMIBAR is yours for the asking...

VISIT OUR BOOTH #39

BIRD & SON, INC.
P. O. Box 4336, Charleston Heights, S. C.
possible flooring contractor well in advance of construction or modernization. Because no floor is any better than the materials selected and the contractor who installs it, a little planning will pay big dividends and tremendous savings on future maintenance.

In most areas of the United States there are contractors who will make a survey of flooring problems, give recommendations and work with architects to furnish budgetary figures, as well as specifications. By proceeding in this manner, a lot of the flooring problems that have faced hospitals and mental institutions in the years gone by will be eliminated.

Here is a formula to follow in selecting a floor covering:

\[ F + YM + YR = \text{Cost per square foot per year} \]

- **F**—First cost of flooring installed
- **Y**—Expected life of flooring in years
- **M**—Cost of maintenance per year
- **R**—Cost of Repairs

---

### ADVERTISERS' INDEX

- Associated Elevator & Supply Co. .......... 6
- Bird & Son .................................. 34
- Briggs Manufacturing Co. .................. 3
- A. R. Cogswell ................................ 36
- Dwoak, Inc. .................................. 31
- Electrend Distributing Co. ................. 34
- Florida Foundry & Pattern Works .......... 32
- Florida Home Heating Inst. ................. 28
- Florida Power & Light Co. .................. 7
- Florida Steel Corp. .......................... 4
- Geo. C. Griffin Co. .......................... 12
- Hamilton Plywood ............................ 10
- Marksowitz Brothers ........................ 2nd Cover
- Miami Window Corp. ........................... 4th Cover
- Mutschler Bros. Co. ........................... 8
- Perlite, Inc. .................................. 27
- A. H. Ramsey & Sons, Inc. ................. 25
- Solite ........................................ 1
- Steward-Mellon Co., of Jacksonville ....... 32
- Thompson Door Co. ............................ 33
- Ben Thomson, Inc. ............................ 36
- Troppix-Weave Products ..................... 5
- Unit Structures, Inc. ....................... 30
- F. Graham Williams Co., Inc. ............. 35
- R. H. Wright & Son .......................... 3rd Cover

---

F. GRAHAM WILLIAMS, Chairman
JOHN F. HALLMAN, JR., Pres. & Treasurer
MARK F. J. WILLIAMS, Vice-Press.
FRANK D. WILLIAMS, Vice-Press.

ESTABLISHED 1918
F. GRAHAM WILLIAMS CO. INCORPORATED

“Beautiful and Permanent Building Materials”

ATLANTA, GA.

1690 BOULEVARD, N. E.
OFFICES AND YARD

FACE BRICK
HANDMADE BRICK
“VITRICOTTA” PAVERS
GRANITE
LIMESTONE
BRIAR HILL STONE
CRAB ORCHARD FLAGSTONE
CRAB ORCHARD RUBBLE STONE
CRAB ORCHARD STONE ROOFING
PENNSYLVANIA WILLIAMSTONE
“NOR-CARLA BLUESTONE”

STRUCTURAL CERAMIC
GLAZED TILE
SALT GLAZED TILE
UNGLAZED FACING TILE
HOLLOW TILE
ALUMINUM WINDOWS
ARCHITECTURAL BRONZE
ARCHITECTURAL TERRA COTTA
BUCKINGHAM AND VERMONT SLATE FOR ROOFS AND FLOORS

We are prepared to give the fullest cooperation and the best quality and service to the ARCHITECTS, CONTRACTORS and OWNERS on any of the many Beautiful and Permanent Building Materials we handle. Write, wire or telephone us COLLECT for complete information, samples and prices.

Represented in Florida by
LEUDEMAN and TERRY
3709 Harlano Street
Coral Gables, Florida
Telephone No. HI3-6554
MO 1.5154

APRIL, 1959
Can Substitution Be Controlled?

With the Construction Specification Institute in Florida flourishing like the proverbial green bay tree (new chapters are now forming in Jacksonville, Orlando and Tampa) most technical evils in current specification writing will eventually be curbed, if not universally eliminated. But there is one specification evil which no amount of technical study or research can erase.

This is the tendency — which both contractors and building product manufacturers maintain is increasing — to permit easy and often radical deviation from provisions of specifications by architects who have prepared them as instruments of professional service.

The shoe must fit, of course, if you are to wear it. In many firms the integrity of a specification is as closely guarded as the architect’s own professional reputation. Such firms are usually the successful ones. They enjoy the confidence of their clients and the respect of those who construct the buildings they design. Contractors who bid their jobs know they will be treated fairly. Companies furnishing the type of products specified realize that their particular brand has a chance of selection equal to others and that neither substitution on a mere price basis or an unwarranted delegation of choice to the whim of an owner will be tolerated.

But, say the product people in particular, this type of firm is rapidly becoming an exception to the rule. Too many architectural firms are yielding to the pressure of various sorts of expediencies and are permitting substitutions to such a degree as to actually change the character and quality of buildings they design. One manufacturer’s representative recently described the situation in these blunt terms.

“I used to work my head off to get specified. Now I’d rather not be mentioned in the specs. I’ve got a better chance for an installation by wangling a substitution than I had when I got an outright written spec.”

Competition, of course, is keener today than ever. And the day of the tightly closed specification probably marked the end of a certain era in the construction industry. Product people realize this. Most of them aren’t dismayed by competition and don’t advocate the type of specification that prevents it. But they do believe that a specification should be so written as to indicate the character and quality of the construction materials, products and services wanted. Wholesale competition can operate within the limits specified. But when the architect permits deviations from specification standards so that cheapness becomes a substitute for quality, he relinquishes his professional control of his client’s building to the influence of slick salesmanship and the come-on of a quick-buck deal.

No one can blame a building owner for wanting to save money on his job in any practical way. But so long as the architect is a professional man, his responsibility is to plan for savings to the owner. Once that plan is documented in drawings and specifications, he must control the character and quality established.

Professional integrity, like virtue, is often easier to maintain than some people realize. All it takes is one word. “No”, said at the right time to the proper person will usually do it.
CONSULT AN ARCHITECT

The architect is the captain of your building team. He is the person who draws the plans... specifies materials... takes bids on the job... supervises construction and approves payment of the bills.

An architect is an artist — a creator — a person with the unique ability to combine art and business, inspiration and science, imagination and sound judgment. To become a qualified architect calls for 10 or more years of intensive study and apprenticeship, and licensing by the state in which he practices. All this is to prove an ability to solve whatever type building problem you may have.

Building a home, or any other structure, is one of the biggest investments most people make in a lifetime. To protect that investment, consult a professional... an architect. He is your guide to greatest value for your building dollar.

E. H. Wright & Son is proud of its friendship with the architectural profession in this area. As a leading producer of concrete and concrete products, we constantly strive to produce the materials and render the services the architect requires for sound, successful building.
CURTAIN WALL

BY

"miami"

How Can You Solve The Problem of Anchorage?

The method of anchoring a curtain wall to the structural frame of a building will largely determine the overall performance of the curtain wall itself. Depending on the method adopted, solution to ever-present problems of thermal expansion, building tolerances, even moisture drainage, may be easy or difficult to develop. The type, location, and number of anchorage devices can mean the difference between smooth, trouble-free installation or a series of job complications resulting in wasted time and labor, unavoidable extras and soaring costs.

And there’s the matter of safety, too. The finest curtain wall system is only as strong as the anchors which fasten it to the structure of the building. The question of anchorage is that important.

How to answer it? A curtain wall system can be set on and bolted to shelf angles. Or units can be suspended and fastened with clips. Or Mullions can be rigidly secured to a wall and the window- and-spandrel units fitted between. Or a structural grid can be used, anchored by means of slotted anchor elements (units) provided as elements of the building’s basic structure.

Which to use — and where and how? The answers must vary according to the type and size of the building involved, the character of its structural system, even the type and design of the curtain wall itself. And each answer must be detailed on the basis of engineering experience and a knowledge of the performance required and the job conditions which will be involved.

We have engineered many answers to such questions, for our job is curtain walls. We can advise you on the anchorage system best fitted for the specific job at hand. We can help you develop the details necessary to satisfy every technical requirement. And as a result we can assure you of a curtain wall installation completed with the skill, experience and service needed to guarantee its satisfactory performance.

REMEMBER:
The real measure of satisfactory job performance is the quality of skill, knowledge and experience behind the products which are involved. When it comes to Curtain Walls, Awning Windows or Projected Sash — in any type of building, anywhere — you can’t specify better than Miami Window . . .

miami window corporation
P.O. BOX 877, INTERNATIONAL AIRPORT BRANCH, MIAMI 48, FLORIDA