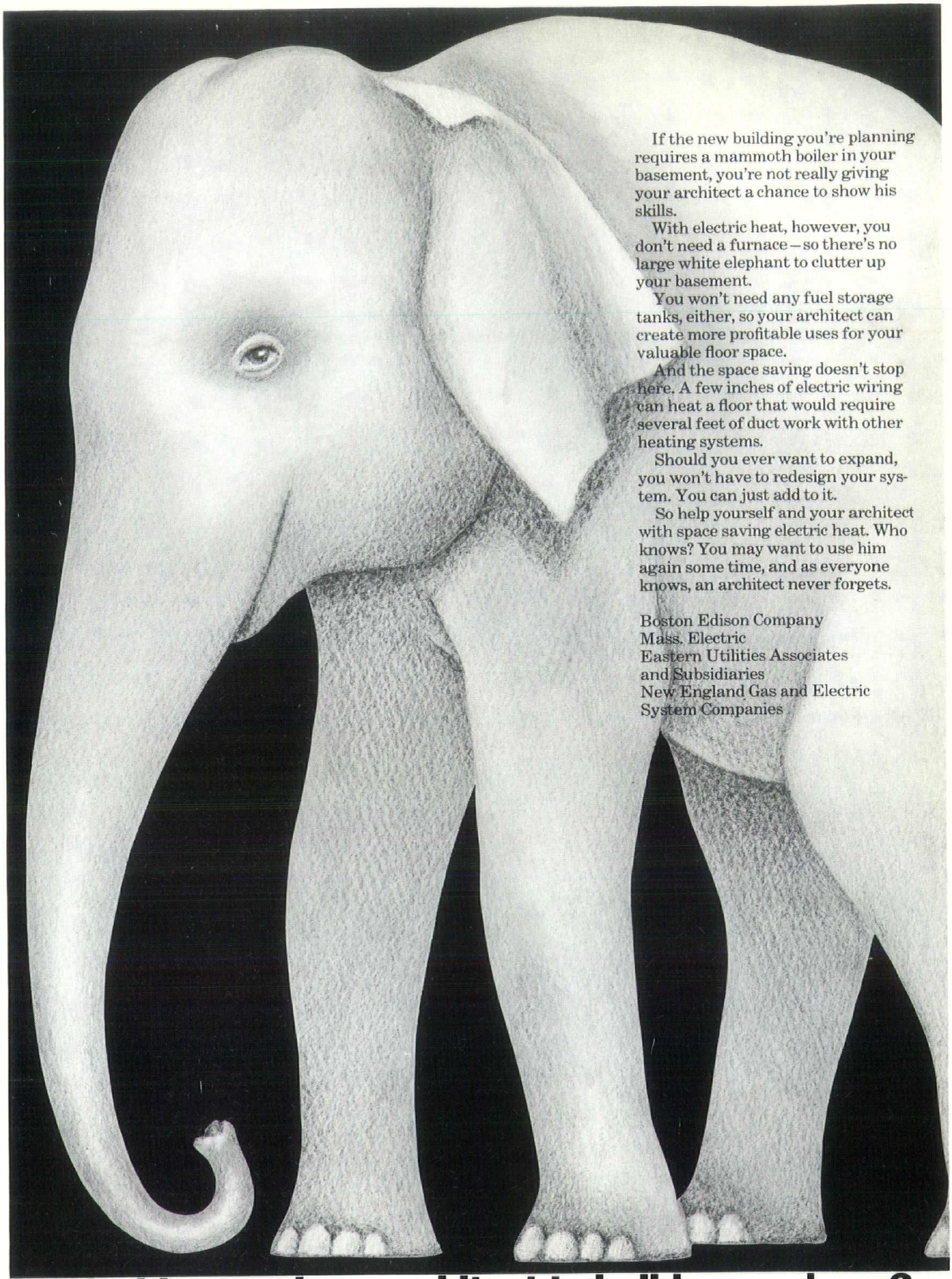
new england Architect

December 1971



If the new building you're planning requires a mammoth boiler in your basement, you're not really giving your architect a chance to show his skills.

With electric heat, however, you don't need a furnace – so there's no large white elephant to clutter up your basement.

You won't need any fuel storage tanks, either, so your architect can create more profitable uses for your valuable floor space.

And the space saving doesn't stop here. A few inches of electric wiring can heat a floor that would require several feet of duct work with other heating systems.

Should you ever want to expand, you won't have to redesign your system. You can just add to it.

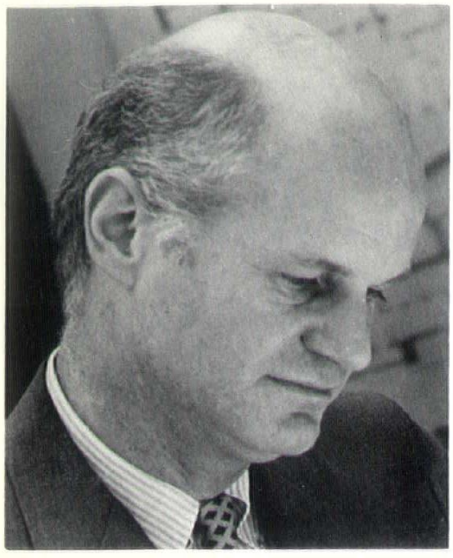
So help yourself and your architect with space saving electric heat. Who knows? You may want to use him again some time, and as everyone knows, an architect never forgets.

Boston Edison Company
Mass. Electric
Eastern Utilities Associates
and Subsidiaries
New England Gas and Electric
System Companies

Would you ask an architect to build around one?

NOTES & COMMENTS

Shepley Heads State Association



Hugh Shepley

The Massachusetts State Association of Architects has announced the election of new officers to the following posts:

President: Hugh Shepley; Vice-Pres: Jacques Fauteux; Sec-Treas: W. Bradford Sprout; Exec. Dir.: Lowell L. Erickson.

Boston Society of Architects

President: Robert S. Sturgis; Vice-Pres: John C. Harkness; Secretary: Hermann H. Field; Treasurer: James C. Hopkins, Jr.; and Exec. Dir: Lowell L. Erickson.

Central Massachusetts Chapter

President: Jacques Fauteux; Vice-Pres: Suzanne O. Carlson; Sec-Treas: Richard J. Lamoureux; Exec. Sec.: Mrs. Dorothy Fassett.

Western Massachusetts Chapter

President: Robert L. Tessier; Vice-Pres.: David Carlson; Sec-Treas: John F. Bednarski.

Delegates to Executive Committee

BSA: Joseph L. Eldredge; Kendall P. Bates; Robert S. Sturgis. Central: Jacques Fauteux; Gardner M. Ring; Suzanne O. Carlson. Western: Robert L. Tessier; David Carlson; John F. Bednarski.

Other newly elected officers of the Boston Society of Architects include:

Commission Chairmen

Commissioner of Professional Practice: George M. Notter, Jr. Commissioner of Public Affairs: Earl R. Flansburgh. Director-At-Large: Robert J. Searson, Jr. BAC Representative: H. Morse Payne. Harvard Representative: Wilhelm von Moltke. MIT Representative: William L. Porter.

Elected Committee Members

Membership Committee: Roger R. Guay, Russell C. Palmiter. Nominating Committee: Huson Jackson, Maurice N. Finegold. Honors and Awards Committee: John R. Myer, Hugh A. Stubbins, Jr. Ethics Committee: Chester E. Nagel.

Rotch Scholarship

The preliminary exercise of the two-stage competition to select the eighty-third winner of the Rotch Travelling Scholarship will be held early in April 1972. Eligibility rules require that applicants must be American Citizens under thirty-one years of age on March 10, 1972, whose architectural record includes study or experience of required times and degree in Massachusetts.

The winner of the Rotch Travelling Scholarship for 1971 was John Patrick Sheehy, who has been work-

(Continued on Next Page)

Robert S. Sturgis, FAIA, partner of Feloney and Sturgis Architects in Cambridge, received the gavel from past president Huson Jackson, FAIA, to assume the Presidency of the Society for 1972. Mr. Sturgis assumed presidency at the Annual Meeting of the Boston Society of Architects on November 17 at the Cyclorama Building, home of Boston Center for the Arts.

ing in Boston for the past few years. Mr. Sheehy is a graduate of the University of Minnesota where he received a Master in Architecture degree in 1967. He left for Europe in mid-September where he will study and travel for the year under the Scholarship grant of $8,500.

This year forty applicants were found eligible and thirty-two actually competed in the preliminary week-end exercise. From these, eight finalists were selected by a jury to enter the final nine-day exercise.

A detailed statement of eligibility requirements and application forms may be obtained by writing to: Hugh A. Stubbins, Jr., Secretary, Rotch Travelling Scholarship Committee, 1033 Massachusetts Avenue, Cambridge, Mass. 02138, before Thursday, March 9, 1972. All applications are due in the Secretary's office Thursday, March 23, 1972. The scholarship stipend for the year 1972 is $8,500.

Sixty-Six Architects Certified in Bay State

Sixty-six architects have been certified for registration following a written examination in June, reported the Board of Registration of Architects. They join the 2200 architects currently registered in the Commonwealth of Massachusetts.

The new registrants are: Hans Abraham of Concord, Walter W. Anderson of Weymouth, Colebert L. Andrus of Boston, Lawrence C. Bauer of Cambridge, Edward C. Benner of Watertown, Moritz O. Bergmeyer of Boston and Sergio Berizzi of Cambridge.

Also, Gordon A. Bertrand of Raleigh, N.C., Allen J. Boemer of Newton, Gilbert V. Boro of West Newton, Rodney F. Burnett of Wakefield, Stuart L. Carter of Cambridge, Edward F. Cassidy of Arlington, Walter S. Cluett of Boston, John R. Coburn of Winchester and Michael D. Cohen of Watertown.

Also, Kenneth F. DiNisco of Waban, Joseph A. Diviney of Cambridge, Hovhannes Donabedian of Newton, Gregory Downes of Cambridge, John M. Ellis of Cambridge, James J. Fitzgerald of Topsfield and Charles B. Gilchrest of Boston.

Also, Richard J. Green of Marblehead, Peter D. Haney of Watertown, Vernon L. Herzeelle of Cambridge, Richard H. Heym of Somerville,

(Continued on page 4)

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features

departments

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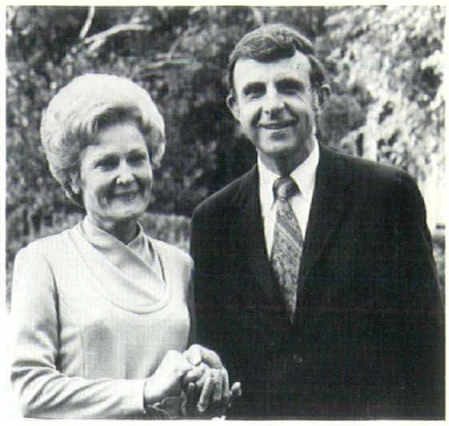
Also, Jehangi J. Musgaseth of Waban, Cecil B. Mullins of Brooklyn, N.Y., Lorrell B. Nichols of Boston, John T. Olson of Boston, George S. Parker of Marblehead, Michael A. Pasquale of Boston, John I. Perkins of Boston, Harold S. Pierce of Lexington, Martin I. Pitt of Hastings on the Hudson, N.Y., Duncan E. Reid Jr. of Boston and Charles F. Rogers of Boston.

Also, Martha L. Rothman of Boston, Dominick Scarfo of Revere, Malcolm Smiley of Sterling Jct., James H. Somes of Brighton, John H. Spencer of Hampton, Va., Tadhg Sweeney of Cambridge, HoLing Teng of Brighton and John F. Travers of Cambridge.

Also, Paul F. Twohig of Braintree, Donald C. Vitters of Arlington, Samuel C. Wang of Cambridge and John G. Williams of Watertown.

Gary Receives Landscape Award



Mrs. Richard Nixon and Robert Lederer, of the American Association of Nurserymen, presented the environmental honors at a ceremony in the East Garden of the White House.

Benjamin Gary, President of the Land Planning firm of Moriece and Gary, Inc., Cambridge and Portland, was recently awarded a Certificate of Merit in the American Association of Nurserymen's 1971 Landscape Awards Program. Gary's award was in recognition of his fine work for the Algonquin Gas Transmission Company in Brighton, Massachusetts, for which he designed a landscaped courtyard. Mr. Orlando Capizzi, President of Anthony Capizzi & Co., Acton, Massachusetts, received an award for the installations.

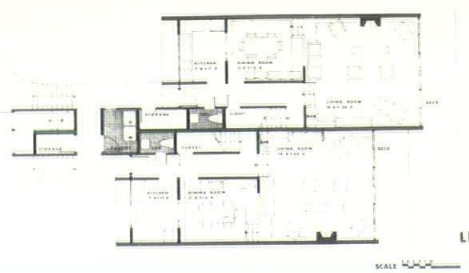
BOOTHBAY CONDOMINIUMS

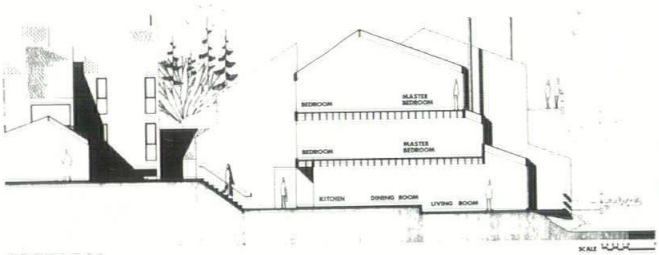
BOOTHBAY HARBOR, MAINE

THE Boothbay Harbor Condominiums were designed by DRA (Drummey Rosane Anderson, AIA) of Wellesley, Mass., for Mr. George Whitten. Through his construction firm, Assembled Homes of Winchester, Mass., Mr. Whitten has been building in New England for over 20 years and is one of the region's largest wood home prefabricators.

The owner and the architect initially visited the site in the dead of winter and felt appropriate a complex that would cling to the magnificent rocky promontory overlooking Boothbay Harbor next to the Booth-

Drummey Rosane Anderson
Newton Lower Falls, Mass.





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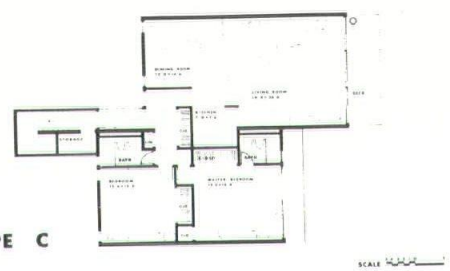

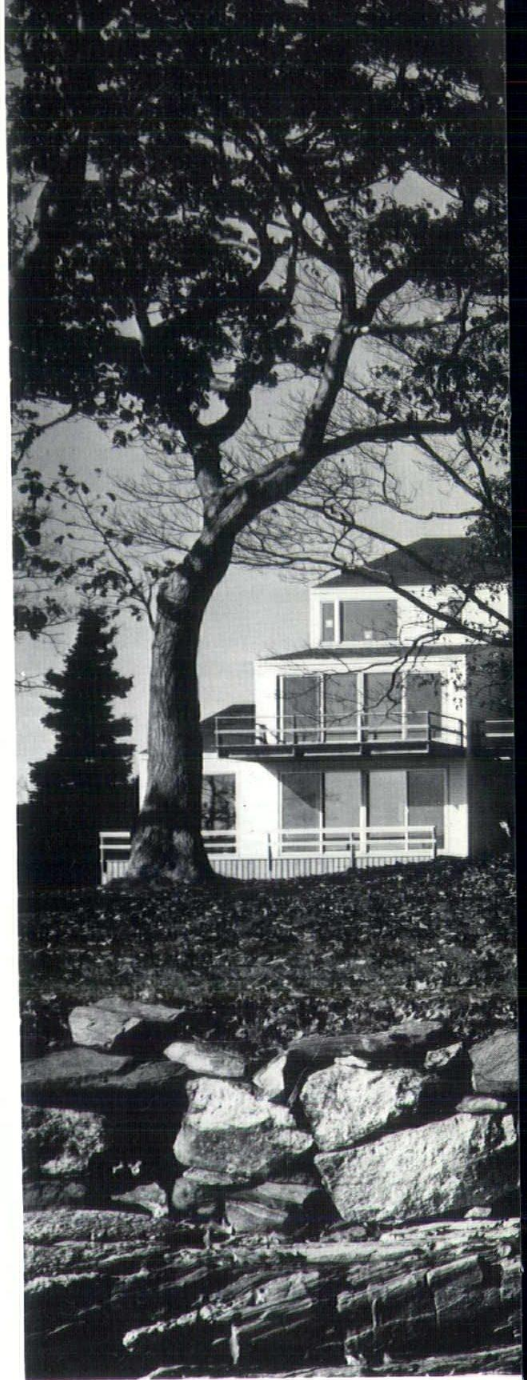

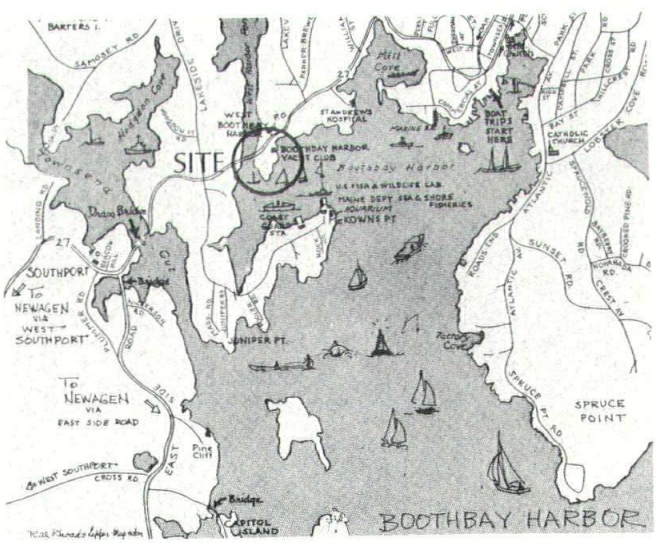

bay Harbor Yacht Club. Through the use of a color scheme and materials indigenous to the area, the units repeat the scale and feeling of the residential architecture of Maine.

Arranging the units within the large structure and varying facades and fenestration served to create a building with human scale and avoid a massive block of readily identifiable units. All units provide luxury accommodations in addition to two bedrooms, two baths, separate dining and kitchen. The 400-square-foot living room is oriented toward

the ocean with sliding glass doors opening onto a large wood deck overlooking the harbor.

For the initial construction stage of 12 units the square foot cost was $18. Nine additional units plus enclosed parking will be provided in the next stage scheduled for summer of 1972.

Principal in Charge: Kevin O'Marah.

Project Designers: Christopher R. Gillespie, Paul T. Connelly.

Contractor: Assembled Homes, Winchester, Mass.

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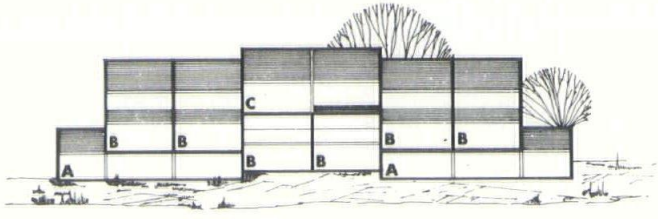
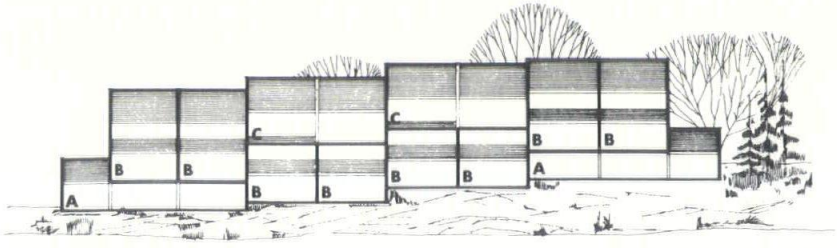
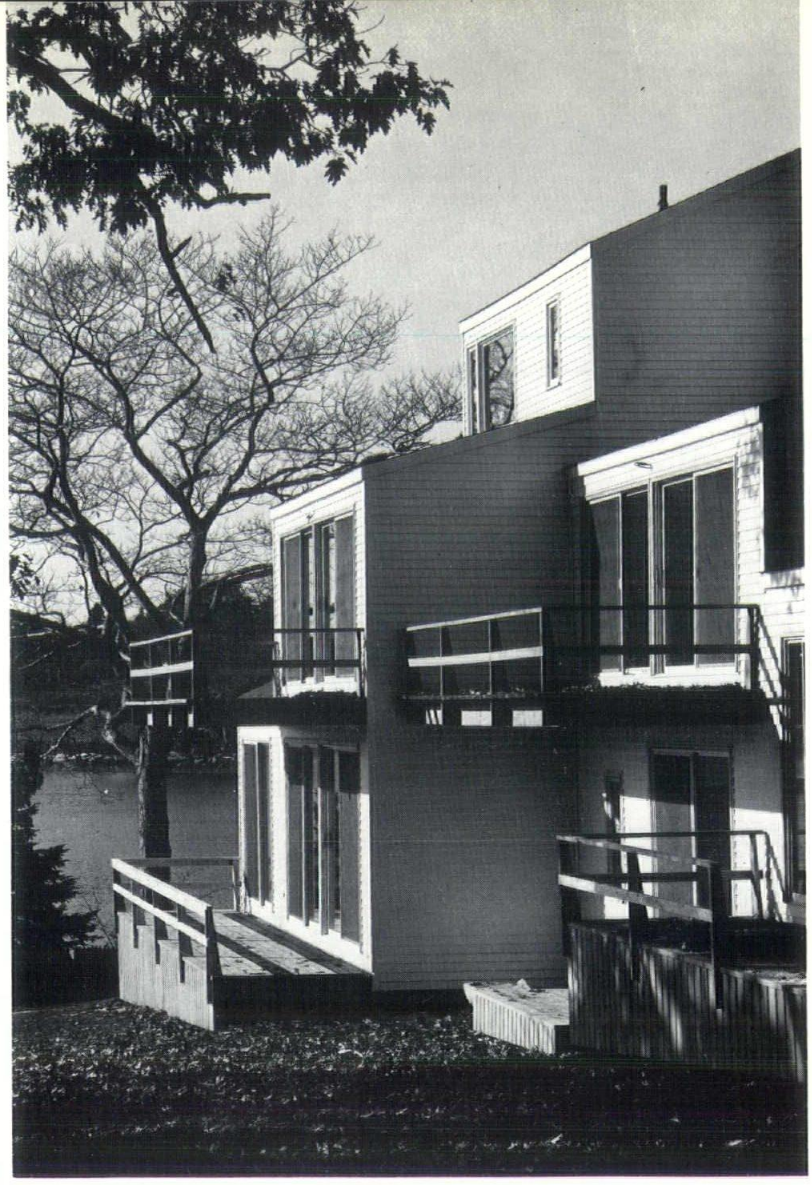


SOUTHWEST

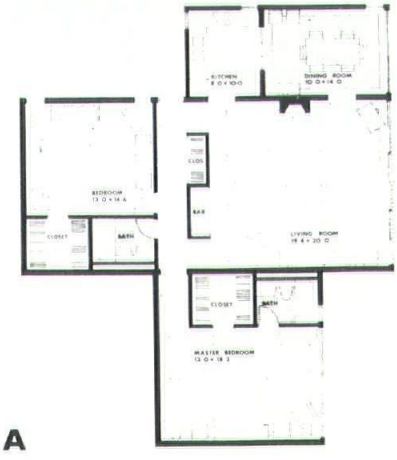


SOUTHEAST

UNIT KEY



Through the use of a color scheme and materials indigenous to the area, the units repeat the scale and feeling of the residential architecture of Maine.



UNIT TYPE A

SCALE

Boothbay Condominiums (Cont'd)

Unit Type A — 1500 square feet.
Unit Type B — 1675 Square feet.
Unit Type C — 1550 square feet.
Distance from town: 1.5 miles.
All living and master bedrooms overlook the harbor.
Baths: One for each bedroom; duplexes, 2½ baths.
Laundry Facilities: One for every three units.

COLOR AND CONCRETE

THE two projects pictured here have very little in common in terms of cost, complexity and function. One, a water tank built by Preload Corporation of New York City for the Manchester New Hampshire Water Works; the other, the Forrestal Building in Washington, D.C. Very little, that is, until one considers the extra measure of concern for aesthetics and environment that determined the final selection of materials used.

In Manchester, the aim was to build a structure that would be aesthetically interesting, one which would otherwise have been merely functional and dull, if not downright ugly, as is usually the case with most "necessary facilities" of this type.

In the Washington project, pavers were used to define access routes and areas designed to be used and enjoyed with ease.

"As surely as the elaborate Renaissance experience used the restrained elegance of the plaza floor as a foil (as in Venice's Piazza San Marco), so the chaste contemporary building can gain by contrast with the richly patterned pavement," said Robert Zion, principal in the New York firm of Robert Zion-Harold Breen, site planners and landscape architects for the Washington project.

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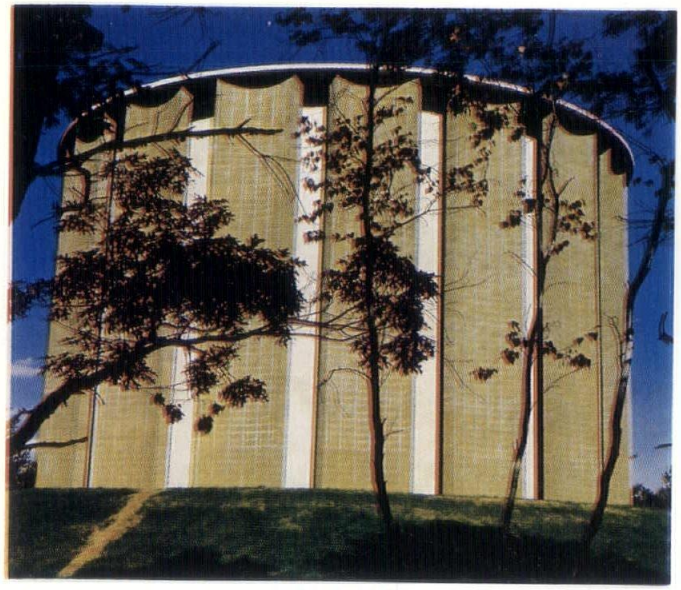


Manchester Water Works Tank built by Preload Corporation. Whitman & Howard, Boston, Engineers. Photo courtesy of the Duracrete Block Company.

Forrestal Building, Washington, D.C. Site planners and landscape architect: Zioan & Breen Associates. Photo courtesy of Hastings Pavement Co., Inc.

(Continued from page 9)

Pavement design is, he believes, "an invaluable tool to the designer of outdoor space. By his choice of materials, he contributes color and texture; by the way he arranges them, the designer can directly influence how the space is used. Appropriate pavement design can relate a building to its surroundings or set it apart, invite or discourage entry, encourage or discourage speed, and direct or divert the eye."

That the tool *is* invaluable, there is little doubt. But with the increasing use of concrete and color in the construction field generally, possibilities of its misuse have multiplied.

With more and more cities across the nation revising building codes to allow for greater building densities — making available large open community spaces for use as recreation and relaxation areas — and with greater numbers of people preoccupied with the quality of their own immediate environment, the matter of material and color selection and the proper use of both has become increasingly complex.

Today architects in their roles of planners, designers, specifiers and builders are called upon to make vital design decisions regarding the use of color in schools. The suggestions offered in the following pages by Howard Ketcham, noted color engineer and consultant, underscore the relative importance of specific colors in the learning environment.

Ketcham believes architects have not dared to lead in the field of color selection, one reason being they are afraid their clients will override them in favor of the selection of more neutral tones. "Safer" colors get more easy approval.

"Architects have been criticized for designing building exteriors by pasting colored strips on boxes," he says. "They should lead in the selection of colors which will be both stimulating and appropriate.

"In selection of colors, those that may be very attractive in textiles may because of their texture be unappealing in fixtures."

The article by Frank Raber, Vice President of Frank D. Davis Company, was written for the NEW ENGLAND ARCHITECT as a guide to the use of color in precast, prestressed, ready mixed and concrete masonry products.

COLOR IN CONCRETE

by Paul Raber

THE integral coloring of ready mixed concrete, concrete masonry, precast concrete and mortar cement has been steadily gaining in popularity. Reasons for this development are numerous and we would like to discuss some of the aspects of this phenomenon especially as it concerns the architect and his specification writer.

Pigments suitable for application in cement and/or other cementitious media such as lime and plaster, have to be completely alkalistable, lightfast and weather resistant. They also have to be relatively low in cost yet to possess high tinctorial strength for a good "yield factor". The latter provides maximum economy as well as assurance that the addition rate of pigment stays within certain limits as set forth by ACI Specifications, calling for a maximum of 10% color by weight in relation to the cement. We will come back to this point again later on.

One group of colors, the iron oxide pigments, will meet all of the above mentioned criteria. They fall into two categories. Natural types, sometimes also referred to as mineral colors, such as umbers, siennas, ochres and others. These are now being increasingly replaced by the newer, synthetic pigments* offering consistent uniformity, greater variety of shades and superior tinting strength. The result is better "money value" (ultimate cost per square foot, cubic yard, masonry unit, etc.) thus assuring maximum economy.

(*The natural Iron Oxides, as the name implies, are mined hematites (Reds), limonites (Yellows) and magnetites (Blacks) with relatively low iron oxide content, the balance being inerts without color value. On the other hand, synthetic (or pure) iron oxides are practically "all color" in their chemical composition resulting in the advantages enumerated.)

In terms of shades Pure Iron Oxide Reds range from (yellowish) Terra Cottas down to (blueish) Burgundies with a large selection of hues in between. Iron Oxide Yellows could be classified as a variety of creams and buffs. Iron Oxide Black, the third pigment of these "basic three", while not producing deep Jet Black tones will give hues from light Gray down to Slate to Charcoal. Browns and Tans are essentially mechanical blends of Reds, Yellows and Black. Most any shade of Brown and Tan can be obtained with the proper proportionate mixing of the "basic three".

The author is Vice President of Frank D. Davis Company, which specializes on a national basis in the formulation and manufacture of pigments for the concrete industry.

Chromium Oxide Green is equally safe in cementitious applications, compared with the iron oxides, but somewhat higher in price per pound. For special projects, where cost is not of prime importance, we should also mention pigments such as Hydrated Chrome Oxide Green (Turquoise), Nickel Titanate Yellow (Canary Tone) and Cobalt Oxide Blues. In the majority of commercial projects, however, the Iron Oxides and — to a somewhat lesser degree — the regular Chromium Oxide Greens are the only ones being used.

The actual color tone of a given shade to be matched is always a function of the right pigment in the right percentage to the cement. In most cases the standard bag of cement, weighing 94 lbs. is used as basis. To obtain a certain shade of Pink, for instance, it will require a given Medium Red Oxide at the rate of 2 lbs. per bag of cement. A higher addition rate, say 4lbs/sack, would result in a more pronounced Red; less than 2 lbs/sack would produce a paler tone of Pink, with lower intensity. This is what is called the loading factor and obviously a multitude of shades can be achieved with standard pigments simply by varying the respective color quantity per bag of cement up or down.**

(**The bag-of-cement-unit is equally applicable to ready mix concrete which is usually expressed in terms of cubic yards. Each cubic yard contains a predetermined quantity of sacks of cement and it is here simply a matter of multiplying and established color requirement per bag of cement with the appropriate cement factor in a cubic yard.)

ACI Specifications, by the way, call for a maximum addition rate of not more than 10% by weight or 9.4 lbs. of color per bag of cement so not to affect adversely the strength of the concrete. For all practical purposes, however, this limit is rarely reached with pure iron oxides due to their great tinting strength. To put it differently: the addition rate of color in concrete or concrete masonry has only an insignificant bearing on the ultimate strength of the finished product.

Actually the architect does not have to concern himself with loading factors, intensity ratios, etc. In most cases it will be sufficient for him to furnish a sample of the shade or shades he wants to see duplicated in concrete or concrete masonry, and the supplier involved, occasionally with the help of the pigment manufacturer, will come up with what is wanted. There are all sorts of methods how a given shade can be specified. Never by a name, though! This is meaningless and frequently confusing. Scientific physical determinations with the help of spectrophotometric data is also unnecessary. Architects can best "fix" the color they want by referring to a swatch in a color card — even if it is not a cement color card but one published by a paint manufacturer or any other industry which shows the desired tone. Small chips of colored concrete which the architect wants duplicated, pieces of fabric, leather or tinted glass — there is no limit to the physical form of the specimen — as long as it only shows the "right color" for the project.

The integrally coloring of concrete, concrete masonry and precast concrete gives the architect a new dimension for an old and proven material. He can transform the unattractive gray of natural concrete into a palette of harmonizing, matching or contrasting hues with great aesthetic appeal. Colored concrete can be placed for floors, driveways, patios, walkways, swimming pool deckings, to mention just a few. Man's newly awakened urge to live in peace and beauty with his surroundings has led to the development of a series of earthy colors in the Brown-Greenish range and referred to as "Breens". A highway department in one of the western states used one of these Breens effectively in the coloring of a concrete bridge to blend with the hues of the surrounding rock formation. Earthy tones can also be achieved in concrete masonry with the appropriate pigment incorporated in standard blocks, fluted blocks and other special shapes and forms, split face units, decorative blocks, slump blocks to mention just a few of the many possibilities.

There is also a functional aspect of colored concrete to identify, caution or guide. Examples for this application are red pigmented underground conduits or ingress and egress lanes as seen, for instance, in the Northwest Freeway leading out of O'Hare Airport in Chicago.

Because of the many variables it is difficult to give exact cost figures for the incorporation of pigment. Most integrally colored ready mix concrete could probably be placed, depending on the depth of shade, at an extra of about 3½ or 8 cents per square foot. No special procedures are required and the colored concrete — like the natural gray one — can be finished in the regular way, assuming good professional workmanship. In concrete masonry the addition of color will mean, in many cases, only a slight increase per unit price.

The long run benefits of colored concrete and concrete masonry are as striking as the immediate ones. Once the proper non-fading pigments have been incorporated they will last for the life of the concrete. There is no upkeep or maintenance cost thus assuring built-in, perpetuating economy of the new structure. Commercial buildings, warehouses, factories, sports arenas are prime targets for color. So are institutional structures such as schools, libraries, hospitals, churches . . .

Modern chemistry has given the architect a new and exciting tool which he should use to its fullest potential.

ARCHITECTURAL PAVEMENTS BY HASTINGS

Tenth Street Mall & Roadway
Architect: David Volkert & Associates

TO many architects and landscape professionals the name of the Hastings Pavement Company of Flushing, N.Y., is synonymous with that of Mario Paone, the comparatively young President of the firm who joined the Hastings sales force in 1953 shortly after leaving Georgetown University. Since then Mr. Paone has devoted a great deal of his time to changing the areas on which America lives, just as Hastings Pavement started almost 100 years ago to change the areas on which America worked.

The name of the firm derives from that of Hastings-on-the-Hudson in New York State, where it pioneered the manufacture of asphaltic pavers in 1885. The early work of the company involved the use of 5 x 12 and 8 x 4 pavers 1½ and 2" thick, along with asphaltic in-place construction.

During World War I they did over a million square feet of this type of construction at the Army Supply Base in Brooklyn. The thrust of the company promotion was toward surfacing piers for Naval shipyards, railroads, steamship lines and for the construction of heavy duty floors for America's rapidly expanding economy.

Typical floor installations were made in machine shops, warehouses, and manufacturing buildings. The product was sufficiently flexible so that it was tailored to the exposure being hard, soft, malleable, chemically resistant as conditions required.

Some use was made of other than asphaltic material, like wood and granite blocks, but this trend really evolved later.

Jobs were streamlined as much

as possible to help in the economical production of large areas. Stiff leg derricks were used and special forks (Tongs) developed for pallet unloading from trucks — as is done today in many industries. Electric platform trucks moved the products onto the job.

During the years 1930-1935 Hastings provided the material for the paving around Central Park from 60th Street to 110th Street. Probably the largest job done to date was in Washington, D.C. where L'Enfant, 10th Street Mall and the Forrestal Building were done using pavers on both sidewalks and streets.

In 1944, the company reorganized to specialize in the construction of malls, sidewalks, patios and other decorative flat areas. They broadened the scope of their work to include the use of all materials such as granite, Mexican tile, slate, brick and concrete to supplement their asphalt pavers and employ field and construction setters and workers who are mostly masons, supervised by Vice President Frank Pace.

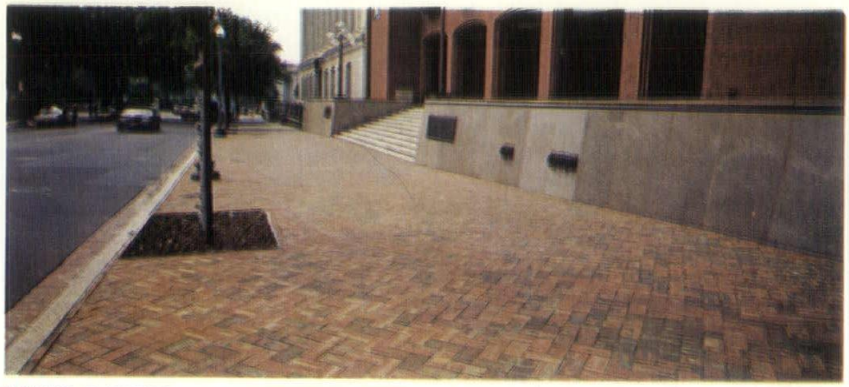
As a result of company reorganization Mr. Paone, with his sales staff and his national group of manufacturers representatives, is able to help the designer with his problems and while there is unlimited opportunity for wide range of selection of materials and development of patterns, economics generally in the final result dictates the selection of materials.

Their representatives are qualified to discuss the technicalities of fill, base courses, sand-asphalt underlayments and perforated underdrains, as well as aesthetics. They often recommend combinations of materials and patterns consistent with the architect's objectives to complement structure.

"Today, as much consideration should be given to work on grade as we once gave to roof construction to control subgrade moisture to minimize effects of freezing and thawing," says Mr. Paone. "A pavement on grade is really an unsophisticated roof."

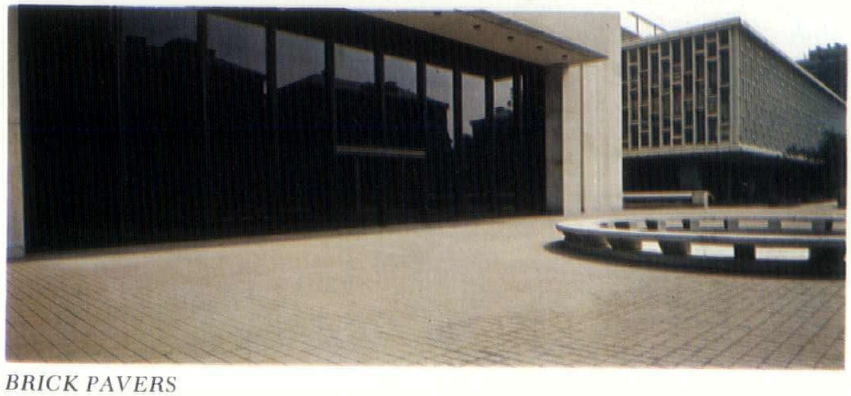
The rules of good construction are based on experience, he believes. For years built-up roofing was used, then butels and now liquid membranes like elastomers are laid on lightweight concrete fills which shape the drainage pattern.

(Continued on page 19)



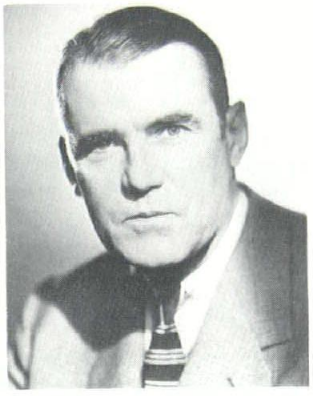
BRICK PAVERS
Court of Claims Building,
Washington, D.C.
Architect: John Carl Warnecke
& Associates
Michael Painter, L.A.

LONDON WALKS
West Side Urban Renewal N.Y.C.
Housing & Development
Administration



BRICK PAVERS
Barnard College Student Center
Architect: Vincent G. Kling
& Associates

Color in Schools



By Howard Ketcham

In 1976 the city of New York will celebrate its 200th Anniversary and Mayor John Lindsay has appointed a committee of 200 to prepare for this event. The color consultant for this committee is Howard Ketcham, who has been putting color to work for American industry since 1935.

Working with the Honorable Constantine Sidanion-Eristoff, Commissioner of Highways, some six miles of colored pavement are planned.

Ketcham learned the magic of color in the auto industry while working with Dupont and came to understand how colors could influence sales and people.

As consultant in the communication field he helped to introduce colored telephones which brought millions of dollars of additional revenue into that industry. Telephones, like automobiles, are no longer only black.

After a short stint in the advertising field, he hit upon the idea of using color in direct mail solicitation which proved immediately effective and profitable.

His advice has been sought and used by the larger stores in America where he has shown how to use color to move people throughout the store and to increase sales.

Harpers has acknowledged him the most imaginative in the field. He has authored many books and articles and has served as consultant to many publications.

IT is, or should be the aim of every school to make learning attractive to the teacher as well as to the taught. To this end it is important that not only the subject matter be made interesting but that it be imparted in surroundings that are both stimulating and harmonious. Such an atmosphere is most efficiently and most easily attained by the correct and imaginative use of color in classrooms, cafeterias, corridors, special areas such as gymnasiums and laboratories, recreation rooms, restrooms and all other centers where the learning process goes on.

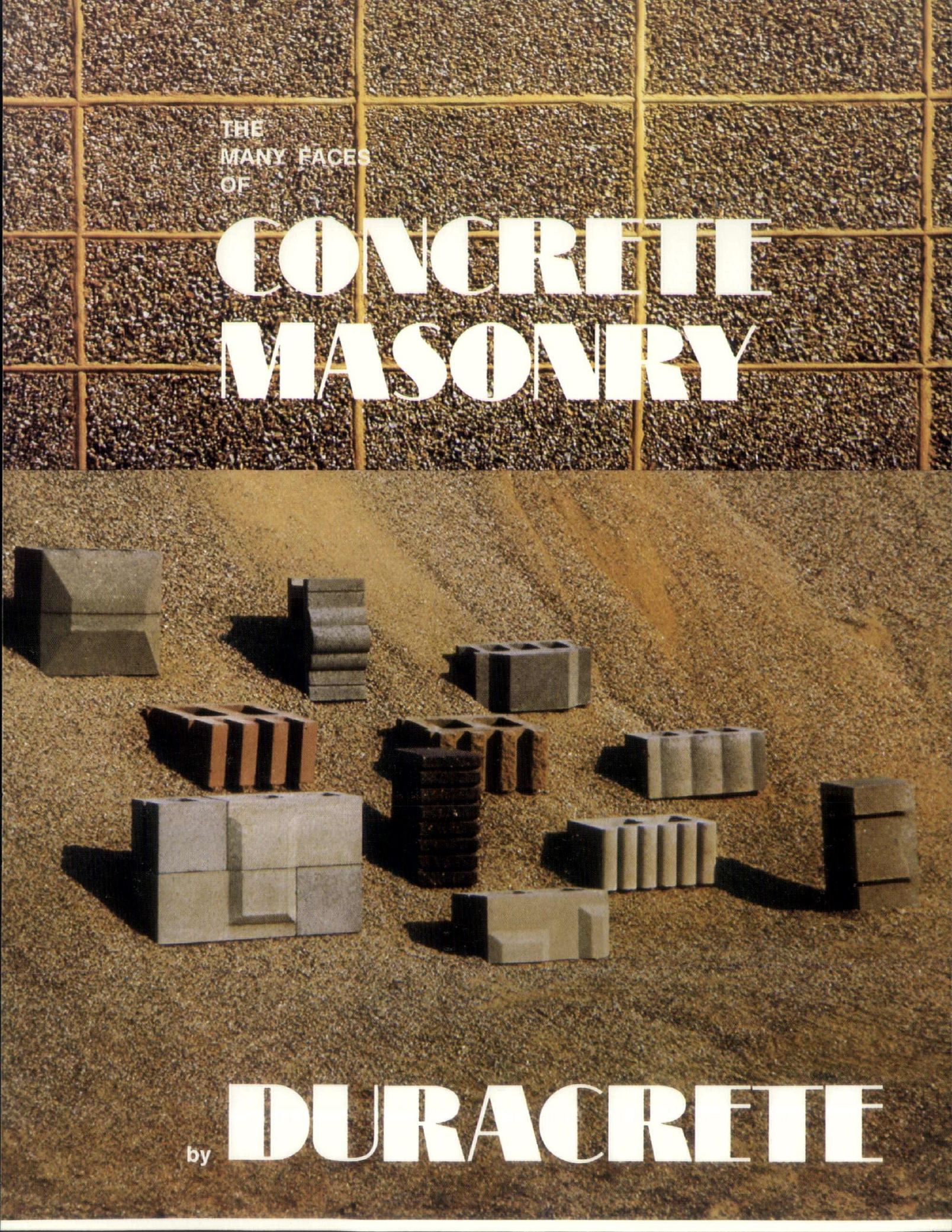
In *all* study areas color must be carefully planned to keep students and teachers alert without intruding unduly on the attention. The most satisfactory plan is to provide a single, pleasant, dominant color in each room and to balance this with neutral, meticulously selected areas of beige or gray. When a different dominant color permeates adjacent rooms, a change of pace is created from room to room that avoids monotony and stimulates new interest for each new class. All colors must be harmonious and keyed to an all-over master color plan so that transition from room to room, while instantly apparent, is never abrupt or in any way conflicting. The value and intensity of all colors must be adjusted to minimize boredom and ensure maximum light reflection without eye strain and visual fatigue.

The location of each color placement area must always be carefully considered. Warm colors are desirable in rooms with northern exposure, cool colors where the windows face south. East and west rooms with sunlight half of the time should present a balance of warm and cool colors or those midway in the spectrum, green or magenta-violet.

Special locations, such as the auditorium, cafeteria, recreation rooms and offices pose a different problem. Here color can and should be less restrained — even gay — to emphasize the real human need for variety and relaxation. Cafeteria colors should be warm, convivial, appetizing and casual looking — soft red and chartreuse are good. Drab, cold, formal or impersonal looking colors should be avoided in dining areas.

Halls and corridors, where there are no windows, are effective in

(Continued on page 19)


THE
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OF
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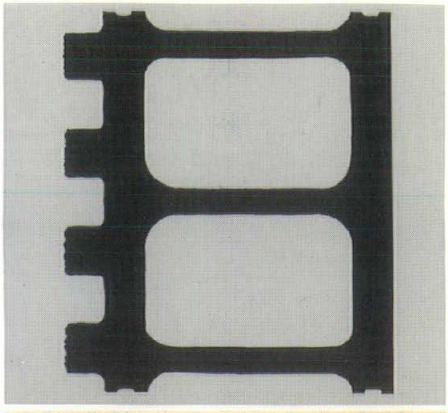

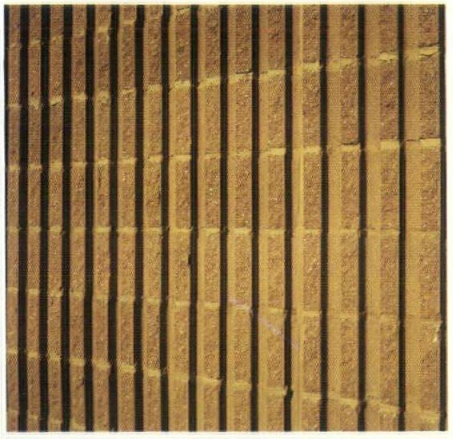

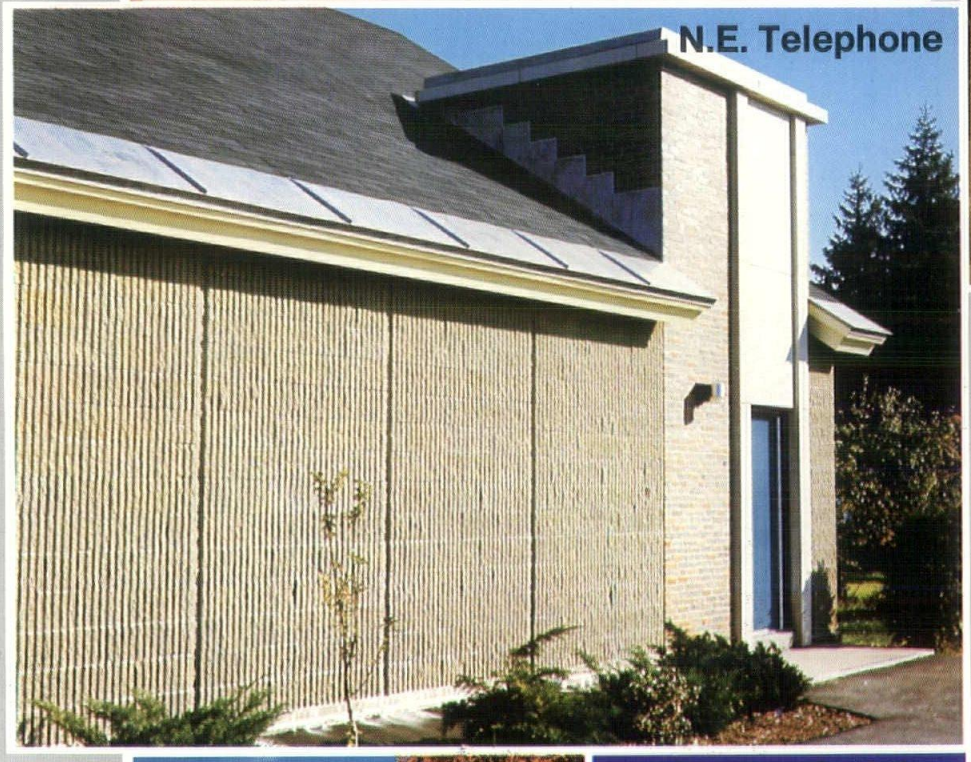

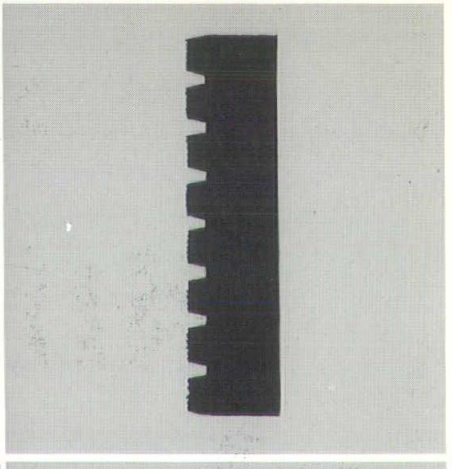

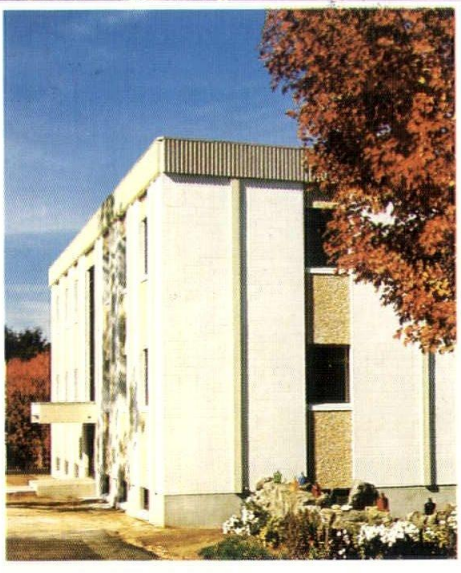

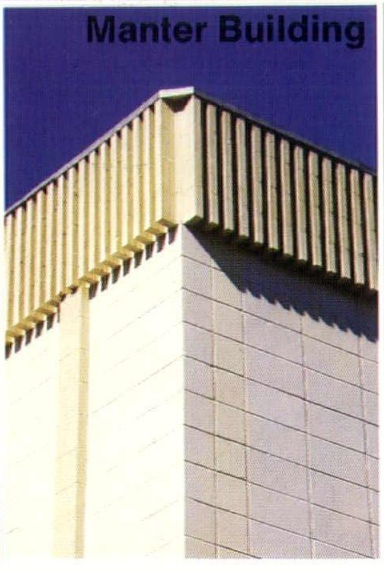

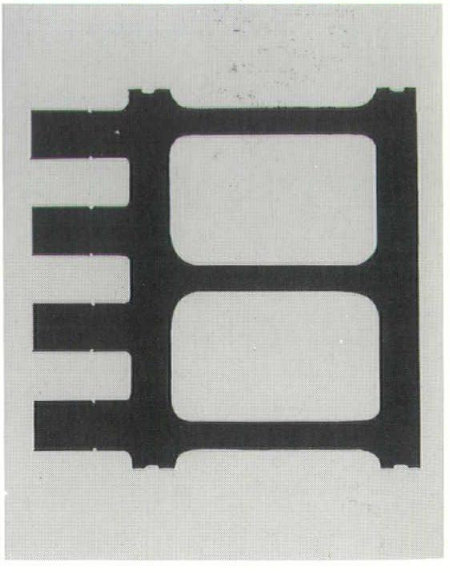

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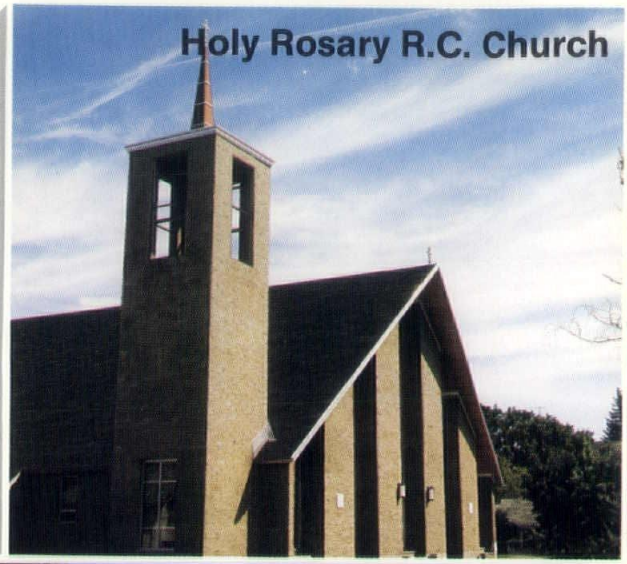
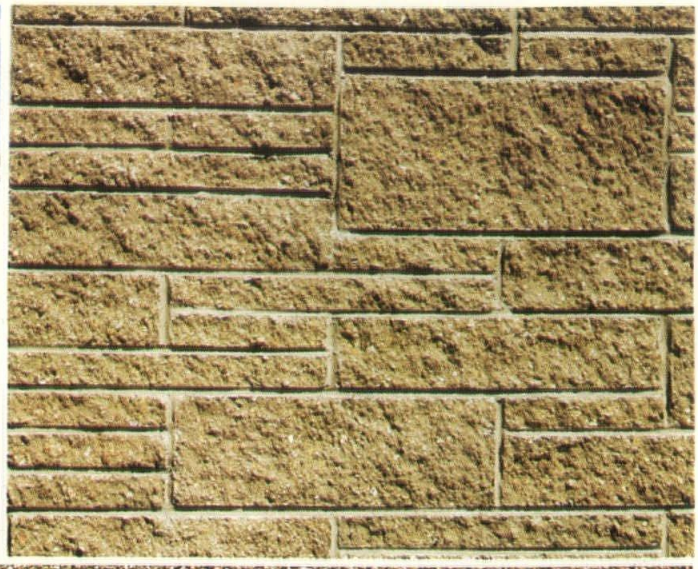
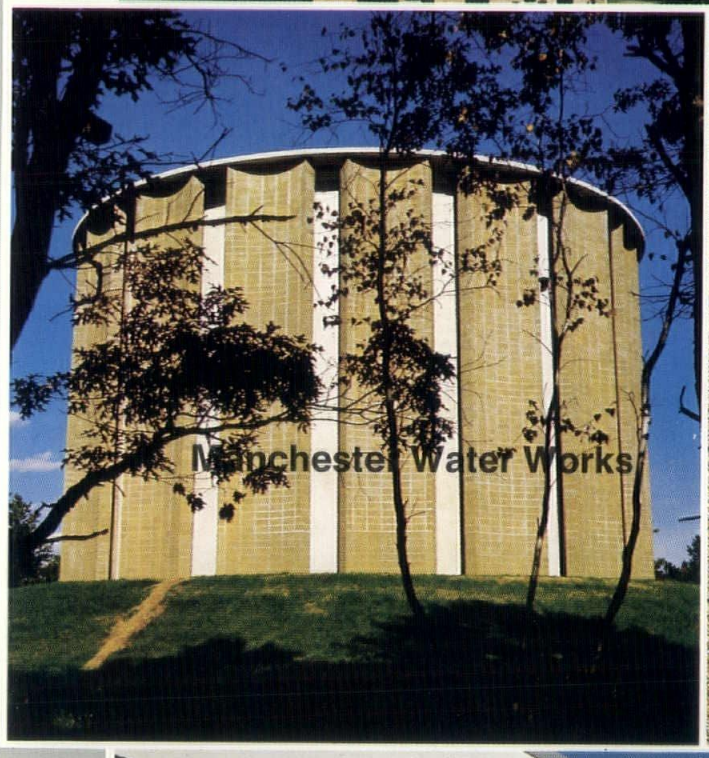
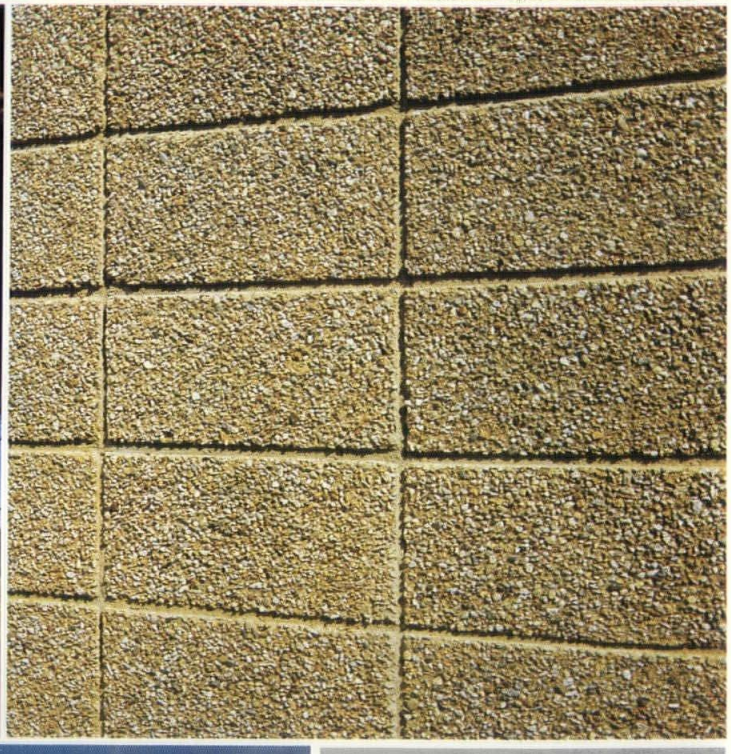


Holy Rosary R.C. Church



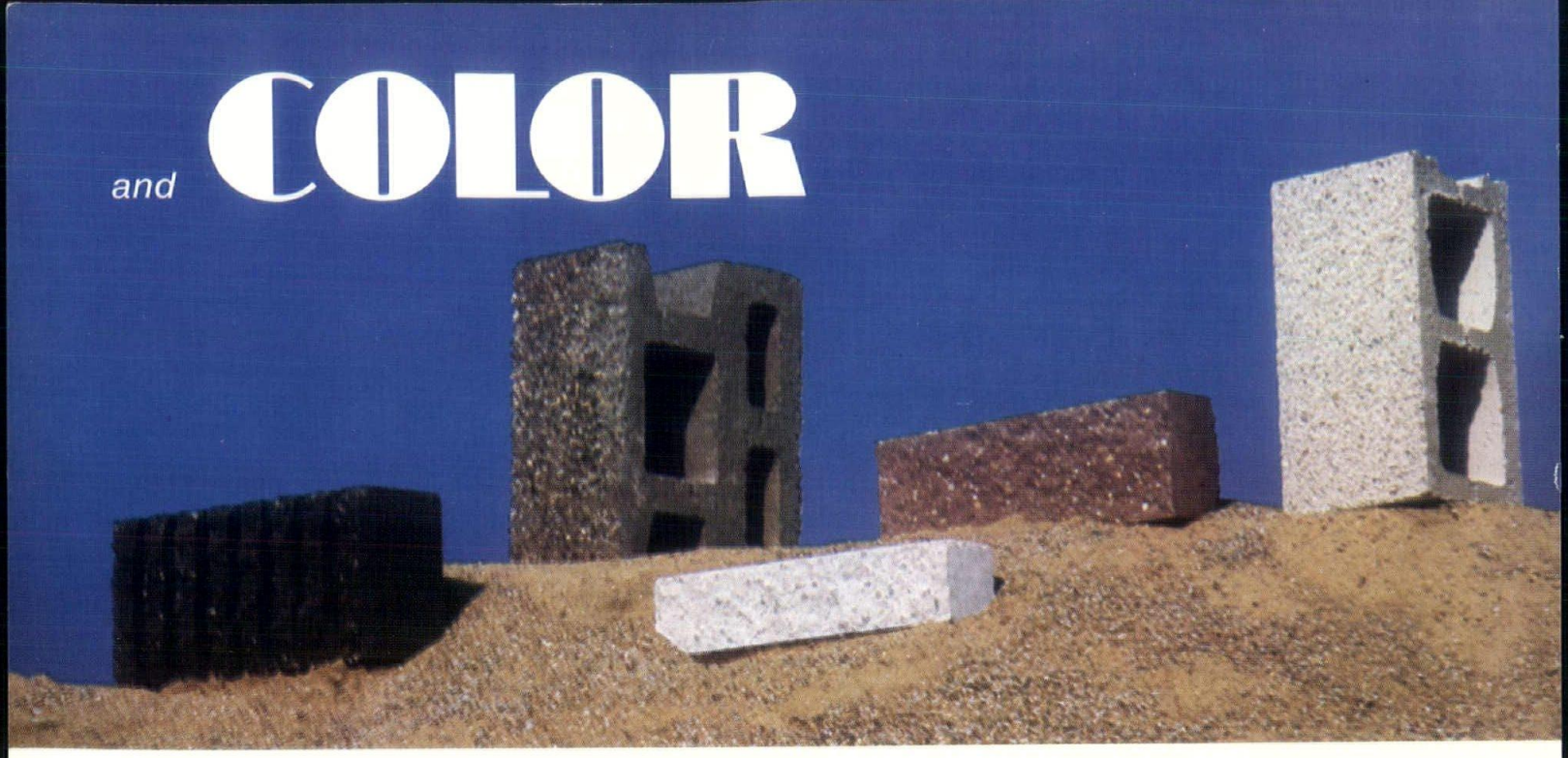


Manchester Water Works



Rochester
Elks
Home

and COLOR



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■ **K-MART** Fitchburg, Mass. Architect: Richard L. Bowen Associates, Cleveland, Ohio Contractor: Hannan Construction Co., Cleveland, Ohio Masonry: Grande Bros., Sudbury, Mass. Split rib masonry walls (4 ribs), single wythe ■ **N.E. TELEPHONE CO.** Merrimack, N.H. Architect: Soule Associates, Manchester, N.H. Contractor: Boyce Construction, Portsmouth, N.H. Split rib masonry veneer (8 ribs) ■ **MANTER BUILDING** Manchester, N.H. Architect: Guy Wilson, Concord, N.H. Masonry: Harpers Masonry, Boscawen, N.H. 12″ concrete masonry units with 4″ deep ribs, facia ■ **HOLY ROSARY R.C. CHURCH** Rochester, N.H. Architect: Robert L. Scagliotti, Salem, Mass. Contractor: Paul J. Roy, Rochester, N.H. Masonry: Littlefield Bros., N. Berwick, Maine Ashlar masonry split block veneer inside and out ■ **MANCHESTER WATER WORKS** Manchester, N.H. Architect: Whitman and Howard, Boston, Mass. Contractor: Preload Corp., New York, N.Y. 8″ exposed aggregate concrete masonry units ■ **ROCHESTER ELKS HOME** Rochester, N.H. Architect: Environment Design Associates, Dover, N.H. Contractor: R. M. Rouleau Inc., Somersworth, N.H. Masonry: Gordon Kennedy 8″ exposed aggregate Formbloc with styrofoam insert, single wythe ■ **HUDSON HIGH SCHOOL** Hudson, Mass. Architect: Whitman & Howard, Boston, Mass. Contractor: Joseph E. Bennett Co., Needham, Mass. Masonry: Antonucci Bros., Malden, Mass. 12″ exposed aggregate Formbloc with styrofoam insert, single wythe

Ketcham

(Continued from page 14)

sunny yellow. Lockers, stools, venetian blinds, etc. look well in grayish buff.

Blue is an excellent color to emphasize spaciousness. It should predominate in auditoriums, music rooms and libraries. Laboratories and special classrooms are appropriate in colors related to the subject taught. I.e. biology rooms can be predominantly green — the most varied color in nature. Sand and buff tones are fine in art studios — they do not distract from work. Sewing rooms are appropriate in blue and dusty pink.

Sash, trim, dados, hand rails, stair risers and doors are effective when they match the wall — in a deeper shade of the wall color — or in a contrasting color equal to the wall color.

There is nothing like "right" color planning to deinstitutionalize a school. Nothing is a greater part of school design than color. The color of a school can be a routine cost or a dynamic investment. An attractive school environment can do much for children whose basic intelligence and taste is masked by the ravages of slum life.

Aristotle said: "Those who educate children well are more to be honored than parents, for those gave only life, those the art of living well."

Hastings

(Continued from page 13)

"Flashing," he finds, "is often not adequately provided for, although much thought and consideration has been given to water tight membranes. The best looking job is of little value if it leaks. Every flat area should have a minimum one per cent slope to facilitate the removal of surface water."

Such considerations however are more often than not merely incidental to the more important aesthetic and environmental aspects of the project.

"If architects would memorialize their names, let them put their plaques in the piazza," Mr. Paone says. "Practically all that remains of many past civilizations is the floors of living areas, the walks and piazzas."

And what of Hastings? Will the Golden Triangle in Pittsburgh, along with Central Park, stand as a memorial to their efforts? Probably.

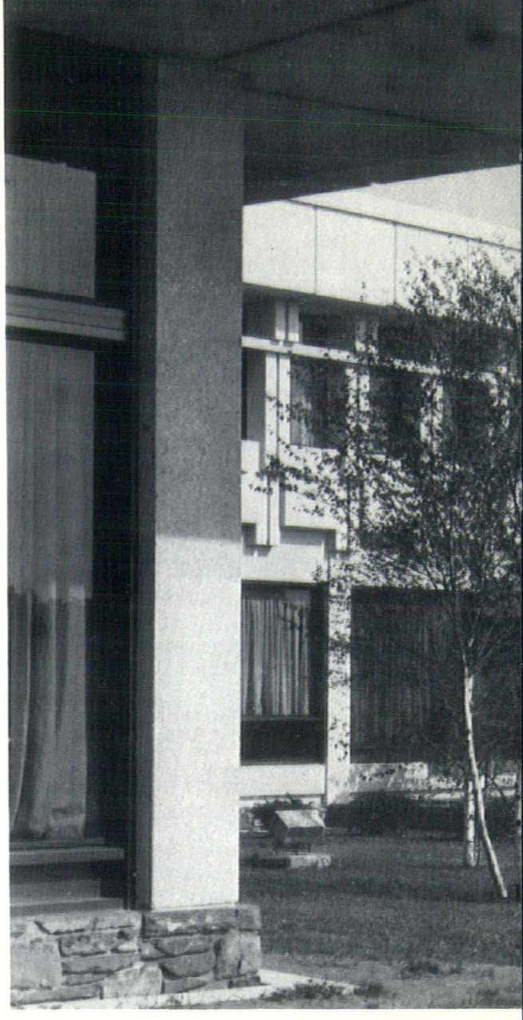
The following quotes excerpted from speeches and articles by Howard Ketcham are offered here as interesting and illuminating tips to architects concerned with planning school environments and dealing with acoustical, visual and physical aspects of the learning process:

"Color "influences" apparent noise levels. Nine phonebooth-like structures were painted on the inside in the following colors: vermilion, chrome yellow, white, green, violet-blue, orange, black, purple and gray. A bell system was installed to provide an identical noise in each booth. A group of 18 young people, free from any hearing defects, was asked to enter each booth in turn and indicate the color of the booth, on a score card, in which the noise seemed quietest and the color of the booth where the noise was loudest. The results of the scoring made on this test showed that the majority of the youngsters thought the noise sounded loudest in the white booth and quietest in the purple one.

"As for color effect on visual apprehension, U.S. Army insurance adjusters were intrigued by results of one color study they made. They were examining records of parking accidents. They found that there were more claims for damaged fenders made when Army drivers parked between two *blue*-colored cars than when the parked between cars of any other color. They concluded that those accidents were caused by the greater apparent space between the two blue-colored cars.

"And what about color's effect on physical comfort? One school cafeteria was embellished with blue paint on upper walls and dark blue ceramic tile on the lower walls. During the winter months a number of the girl students complained about the temperature in the cafeteria, saying it was too cold. The building superintendent was at a loss to understand the complaints since the entire school was under thermostatic control and there were *no* complaints from other areas in the school. So he decided to heat the cafeteria with color. He put vermilion slip covers on the backs of all the chairs and painted a vermilion band around the walls just above the tile dado. You could take one look at this previously cool room and see warmth all over it. The complaints stopped immediately.

"Another powerful element which militates against the color appearance improvement of schools is the architect's primary concern with efficiency. Long before there is any concern with the choice and placement of interior colors for the average school, the building program is usually behind schedule. Color planning is thus relegated to a last moment chore and thus is of necessity hastily resolved from "canned" plans supplied by paint manufacturers. Thus efficiency has become revered above all goals. But good appearance of the school should have to do with good taste and with *all* the elements that go to create beauty and to stimulate intellectual excellence and an awareness of aesthetic values. . . . While it is true that some schools succeed in spite of drab, dreary, depressing, monotonous interiors — when the plus of good color appearance is incorporated in a school, student behavior and intellectual response are measurably enhanced.

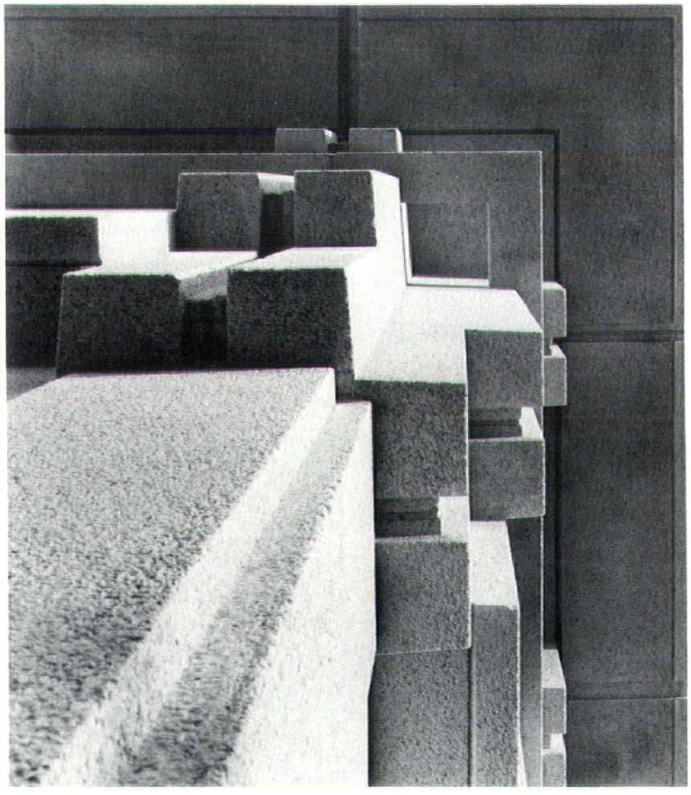


The Allstate Building

Farmington, Conn.

Frid, Ferguson, Mahaffey & Perry
Hartford, Conn.

1971

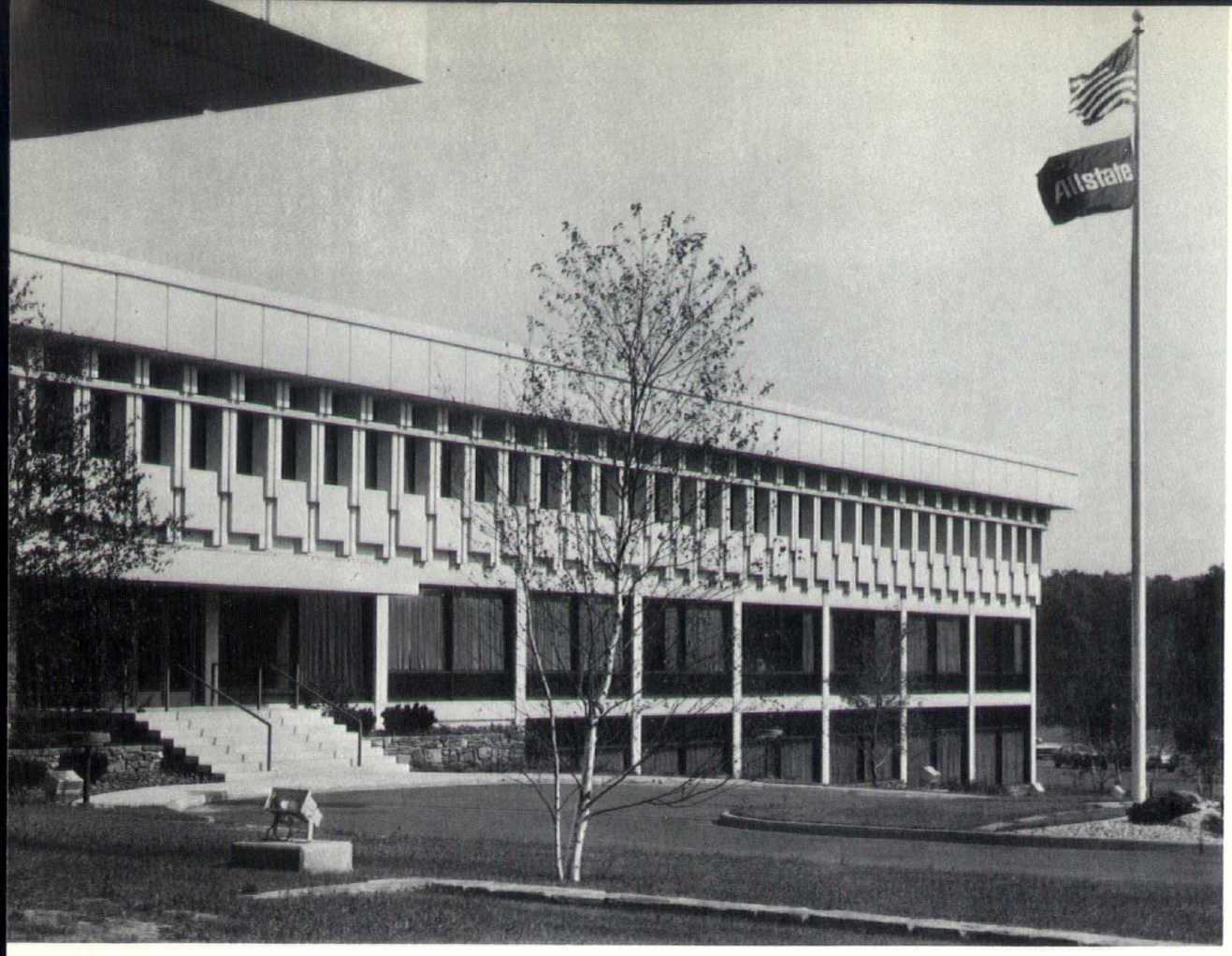


THE Allstate Insurance Company building in Farmington, Conn., designed by Frid, Ferguson, Mahaffey & Perry of Hartford, has been named a winner in the 1971 White Cement Architectural Awards program "for distinguished architectural design in white cement concrete completed during the year 1970."

Six winners, selected on a regional basis by a jury of architects and engineers, included the Plough, Inc. Administrative and Research Center in Memphis, Tenn.; Doctors Office Building, Louisville, Ky.; Costello Terminal, Sioux Falls Municipal Airport, S.D.; Kinghorn, Driver & Company, Houston, Texas, and the Georgia-Pacific Building, Portland, Oregon.

Now in its third year, the competition is intended to demonstrate excellence in architectural design and to acquaint the design professions and owners with the many uses of white Portland cement products and concrete.

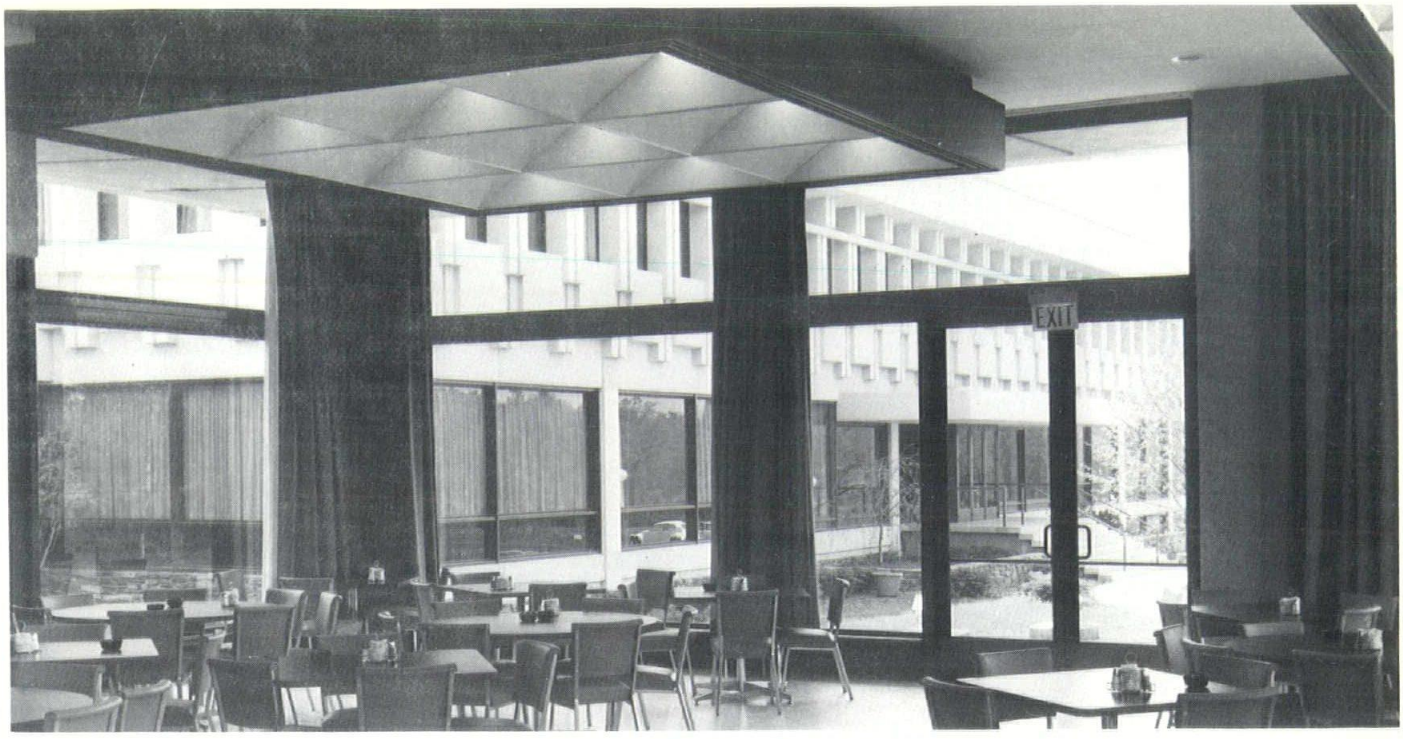
The Allstate Building is a regional office of approximately 127,000



White Cement Award

square feet for an eventual 600 employees, sited on a rolling green Connecticut hillside along U.S. 84 highway in Farmington, about fifteen minutes from downtown Hartford. The building sits above the highway across a grassy slope with a background of tall trees. It was an early decision to show the building in simple white forms for easy comprehension at highway speeds. Plans developed into a three-storey office block with an attached single storey building at midlevel, containing a large cafeteria, kitchen and ancillary facilities.

In the multi-floor building, the upper level containing a perimeter of smaller offices is expressed in a cage or box of precast concrete window panels supported on the lower floors by a thin frame of precast column and beam covers. The off-white concrete structure is filled with bronze colored glass in Duranodic Bronze Frames. The single storey building with its prominently located cafeteria carries the same deep precast concrete fascia over



glass and dark bronze colored brick.

The precast panels are faced with an exposed aggregate of off-white "Topaz" quartz quarried in New Hampshire, set in a white cement matrix. The building is brightly lit with floodlights for maximum visual impact from the highway at night.

Realizing the importance of the precast work on this building, Owner Representatives came east from Chicago, before selecting precast bidders, to interview and tour with the Architects, precast concrete plants in Worcester, Massachusetts, and in Newington and Manchester, Connecticut. Architectural and Engineering Drawings for the precast panels were completed early and bid before signing the General Contract.

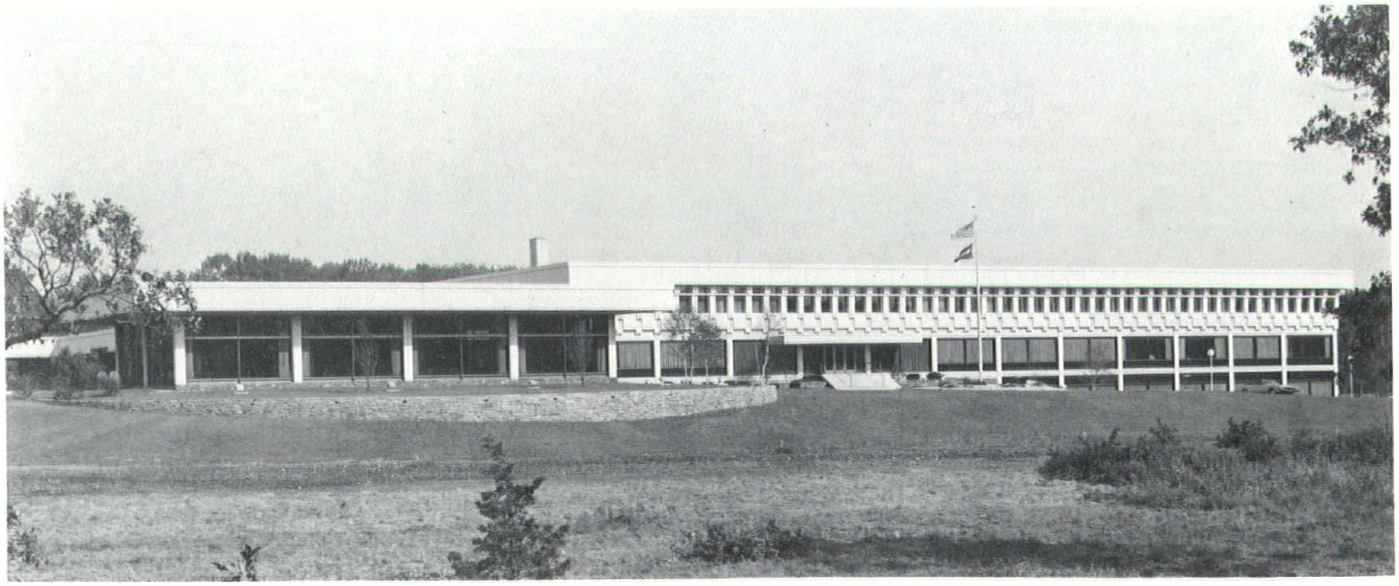
The cantilevered entrance canopy fascia of precast panels continues into the building lobby which has precast concrete floor-to-ceiling wall panels facing the entrance. The Lobby and Cafeteria have floors of cast-in-place terrazzo in color tones matching the exterior exposed aggregate and the stairs use precast tread and risers in similar but smaller aggregates.

The exterior window panels were cast with two windows in one half bay widths, making panels 10'-6" long, 14'-6" high and 2'-10½" deep. The separately cast deep fascia units butt to the window unit heads. The selection of ⅜" maximum aggregate size on the exterior panels gives sharp and clean edges and good shadows on the multi-faceted upper wall units.

Engineers: Macchi & Hoffman, Structural; Bemis, Freeman & Sipala, Mechanical, both of Hartford.

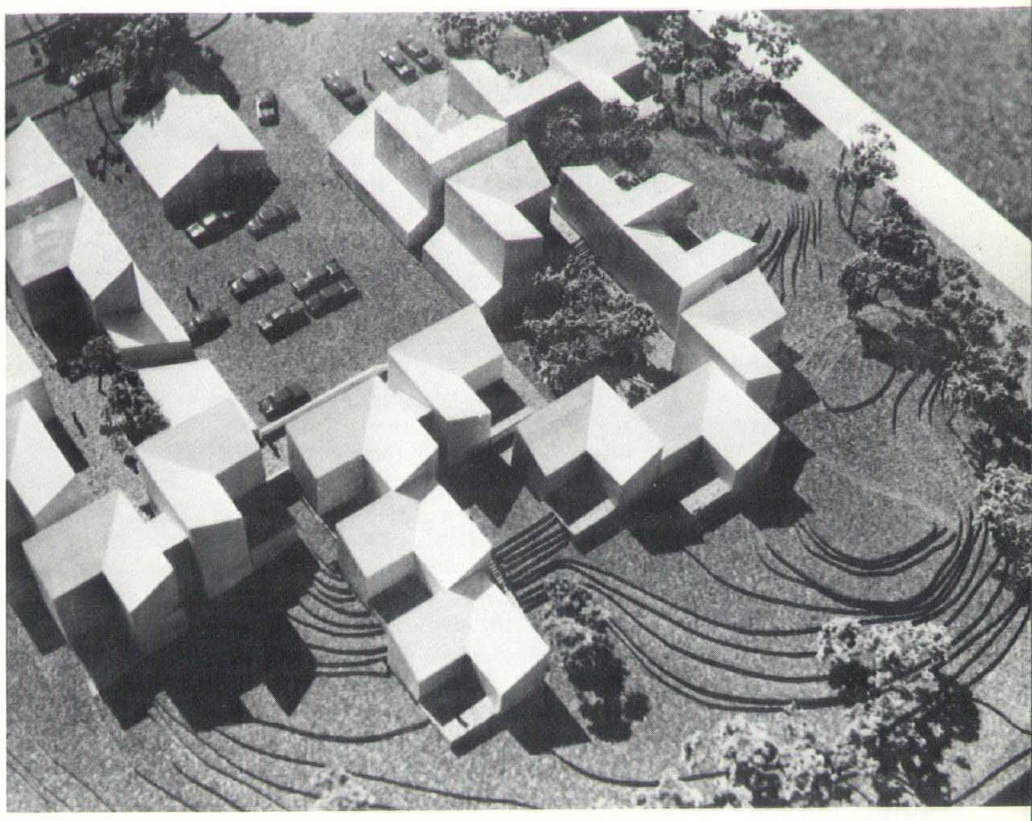
General Contractor: The Southern New England Contracting Company, Hartford.

Precast Contractor: Allied Building Systems, Inc.



Progressive Architecture Award

James Estate Condominium
Newport, R.I.



Chapman & Goyette
Cambridge, Mass.

ONE of the year's highest professional honors, an award in the Annual Design Competition of Progressive Architecture Magazine, has gone to the Cambridge, Massachusetts architectural firm of Chapman and Goyette for their design of the new James Estate condominium in Newport, Rhode Island.

The highly influential design competition is judged by the country's foremost architects, men who, themselves, are winners of U. S. and international design competitions.

The James Estate design, a condominium development of clustered units in Newport, attempts, according to the architects, "to curb the destructive subdivision of a unique area of great old estates, yet introduce two hundred and seventy-five families." The condominium is sited on 70 acres of Aquidneck Island. It is surrounded by large estates on three sides and bordered by a tidal pond and marsh to the south. It contains two-floor duplex townhouses and one-to-three bedroom flats.

Stacked to form buildings up to five floors high, the units on the upper levels include recessed balconies faced away from the neighboring gardens below. The buildings are of unpainted buff gray stucco on concrete masonry. Interior walls and ceilings will be plasterboard and floors not carpeted will be wood or cork.

Nearly seven hundred designs were submitted. Entries are limited to the works of U. S. and Canadian architects which have been commissioned but not yet completed.

A measure of the prestige of the awards lies in some rule-of-thumb statistics on the mortality of architectural commissions. Something like sixty per cent of an architect's work does not get built. The work is ordered and paid for but never built. If, however, one of the designs wins an award in the Progressive Architecture competition, it has an eighty per cent chance of being completed.

Presentation of the Progressive Architecture Citation to Chapman and Goyette will take place at a dinner in their honor at the Whitney Museum in New York on January 14.

Allen Chapman (left), partner, Chapman & Goyette Associates, and Robert Venusti (right), project manager whose design for a 275-family condominium won a citation in the 19th Annual Design Awards Competition of Progressive Architecture Magazine.

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Mar Resistance
Weathering
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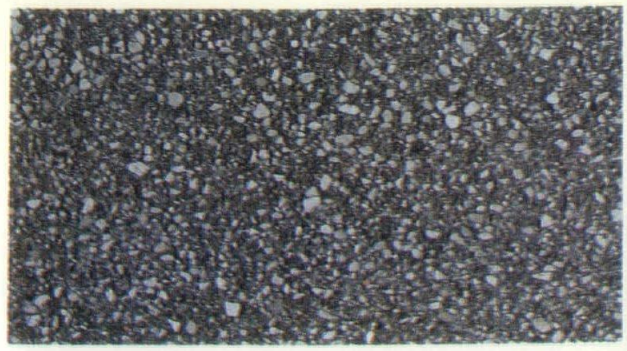
TYPICAL GROUND FACE MASONRY UNITS



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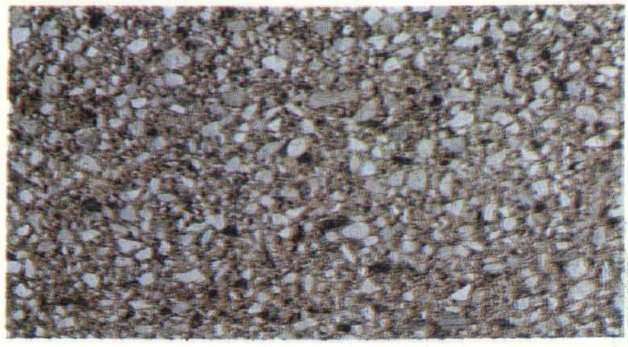

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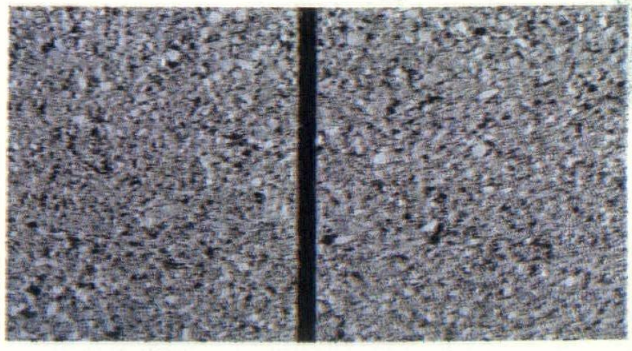

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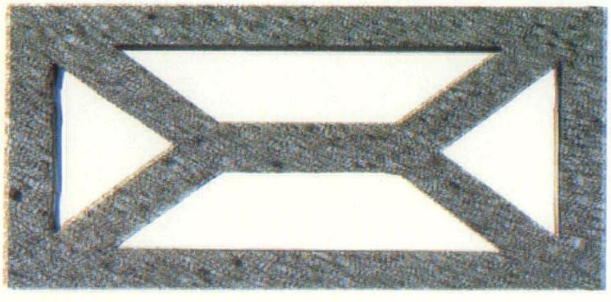

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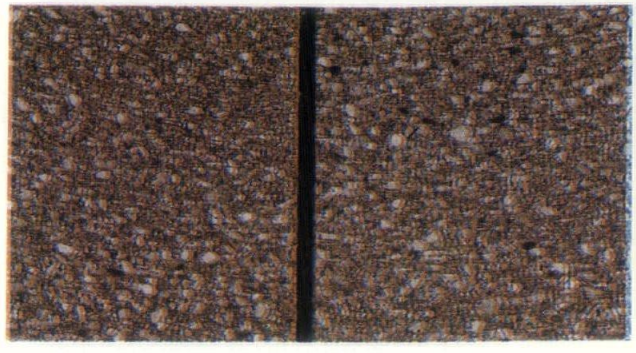

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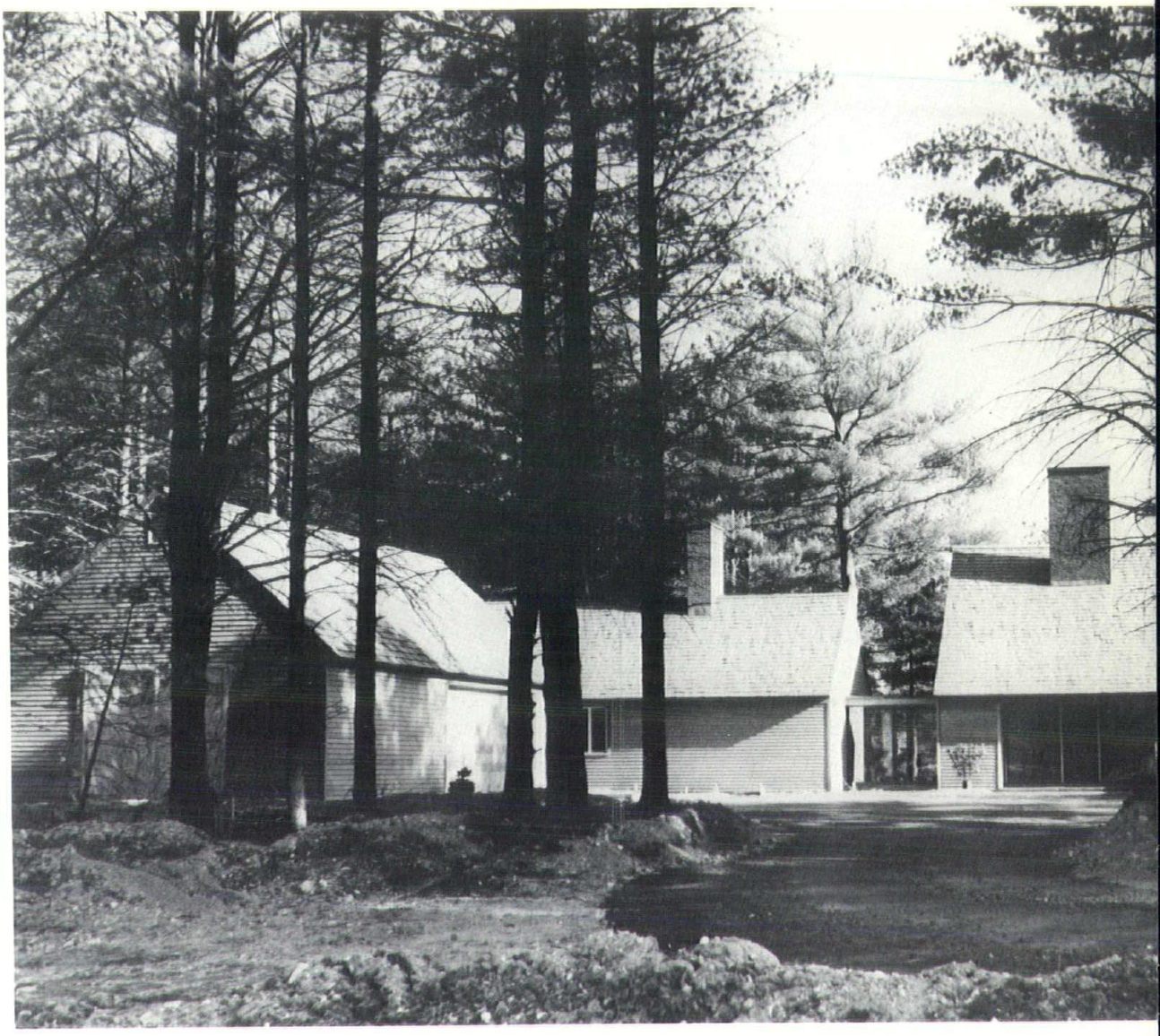


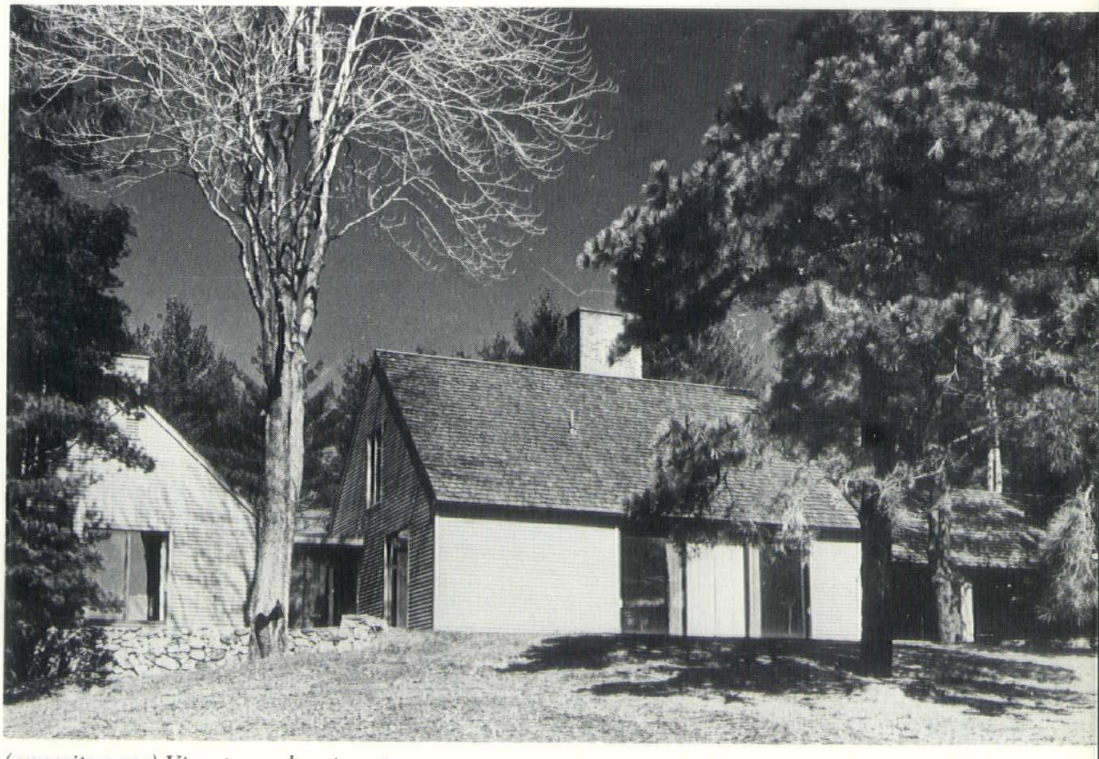
SUBURBAN RESIDENCE

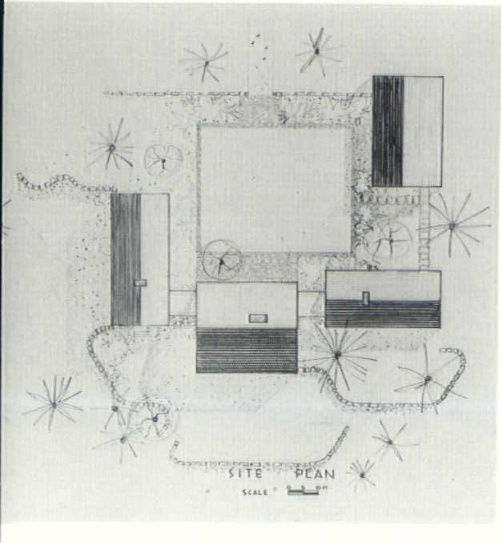
SHERBORN, MASS.

James Walker
Boston, Mass.

THE site of the Suburban Residence designed by Boston architect James Walker of Walker and Horne, Architects, is on the edge of a knoll, sloping gently toward the south. Studded with majestic white pines, this slope overlooks a spectacular and pastoral view across rolling fields to a distant stream.

Requirements listed by the client, a couple with a small child, included use zones to be separated as much as possible for privacy. The house was to provide accommodations for informal country living and facilities for occasional large parties. The initial program called for three bedrooms with area for future expansion.





(opposite page) View toward main entrance.
(upper left) Entry area with Dining Room fireplace visible beyond glass "link".
(upper right) Kitchen.
(bottom) Sliding glass doors of Living Room are visible in this view from the south.

In addition, the house was to be New England in character and was to complement the owner's collection of antique furniture and art.

The functions of the house have been placed in four pitched roof units, separated for privacy. Each unit contains, at the first floor level, a particular activity relating directly to the owner's needs. These units form a motor court on the approach side to the north and contain garage, cooking-dining, living room and entry, and master bedroom-study respectively.

The three living units, each with its own chimney, are connected by glass links which open to provide through ventilation and access to exterior spaces. Living areas are oriented to the southerly terraces, view and sun. Maximum opening and accessibility are provided via Arcadia sliding glass doors, with maximum closure to the motor court for privacy.

Guest bedrooms are above the central living area and space for future expansion has been incorporated at a lower level of the master bedroom unit, facing west.

Clapboards with their rough side out, cedar shake roofs, and water-struck brick chimneys enrich the character of the pitched roof units. A sense of textures is maintained on the interior by using rough plaster walls, oak and quarry tile floors. Interior doors, made at the site and standing finish, are rough-sawn pine.

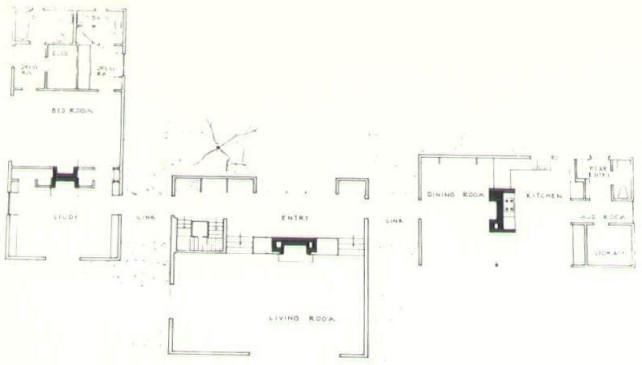
Shop fabricated exterior wall panels were delivered to the site complete with windows, siding and a prime coat of stain, along with precut joists and rafters.

Builder: L. H. Hewitt, Jr., Weston, Massachusetts.

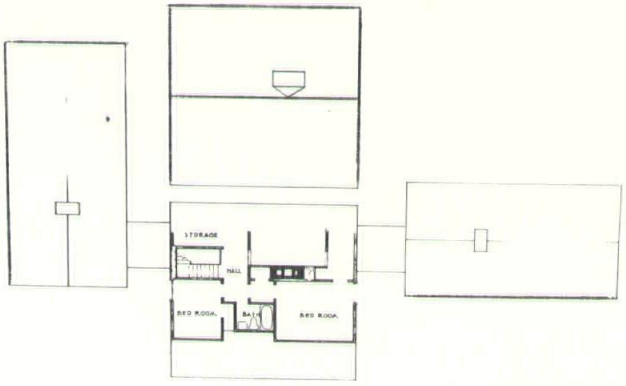
Prefab Supplier: Hodgson Houses, Millis, Massachusetts.

Structural Engineer: Abraham Woolf and Associates, Inc., Boston.

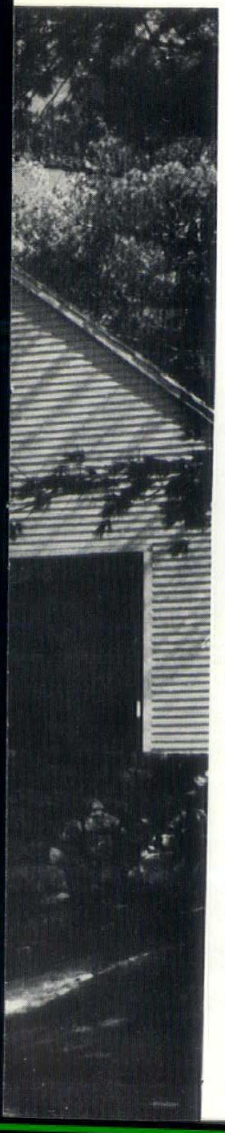
The Master Bedroom, like the entertaining and dining spaces, is located at ground level and housed in a separate unit for privacy. Window to the left is in one of two dressing rooms adjacent to the bedroom.



First Floor Plan



Second Floor Plan



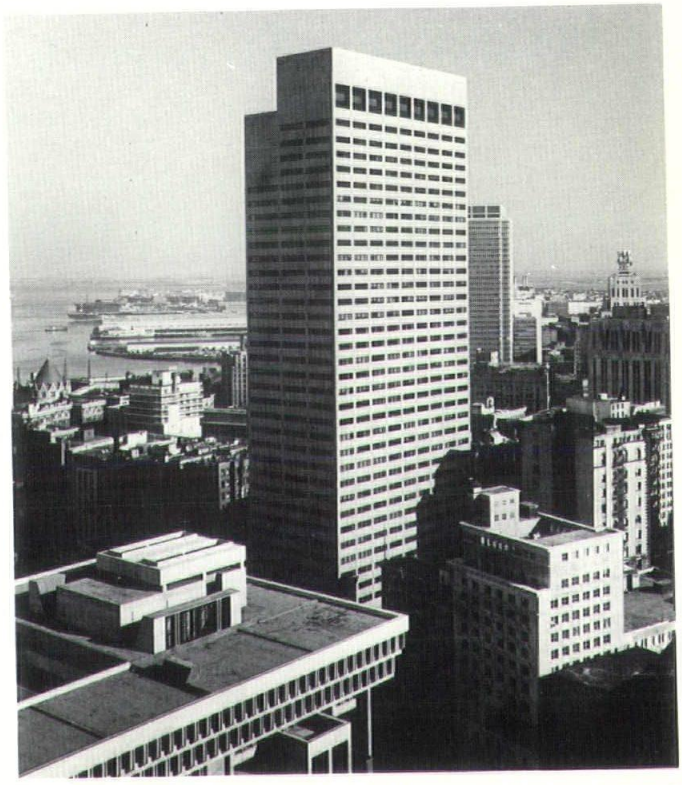
(upper left) Dining Room
(lower left) Sliding glass doors of Dining Room open to southerly terraces, view and sun.

Richard Sharpe Names Three Associates

Richard Sharpe, FAIA, Architecture, Interiors and Urban Design, of Norwich, Connecticut, announces the appointment of three Associates to the firm effective January 1, 1972, thus changing the name of the firm to Richard Sharpe Associates. Those appointed are Frederick C. Biebesheimer III, Padmakar Vasudeo Karve, and Jonathan B. Isleib.

Mr. Biebesheimer graduated in 1962 from Cornell University, joining the firm in 1965. Mr. Karve received his Bachelor of Architecture degree in 1959 from Maharaja Sayajirao University in Baroda, India, a Master of Architecture Degree from Oklahoma State University in 1961 and joined the firm in 1967. Mr. Isleib graduated from Pratt Institute in 1965 and after serving with the Peace Corps in Santiago, Chile, joined the firm in 1967.

Harleston Parker Medal Awarded to Edward L. Barnes



The Boston Society of Architects has announced that the coveted 1971 Harleston Parker Medal for distinguished architectural achievement will go to Edward L. Barnes, FAIA, of New York for his design of the New England Merchants National Bank Building in Boston.

The Medal will be formally presented to Mr. Barnes in the Spring by the Mayor of Boston.

Established in 1921 by the noted Boston architect J. Harleston Parker, the award was created "to stimulate the appreciation of good architecture by the public" and it is one of the few (if not the only one) in the United States to give public recognition by a city to architects who have succeeded in doing exceptionally fine work.

F/T Names Janssen Chief Structural Engineer

Heinz H. Janssen

Heinz H. Janssen, Professional Engineer, has been named Chief Structural Engineer for Fletcher-Thompson, Inc., architects-engineers of Bridgeport.

He succeeds Ayres C. Seaman, P. E., who retired December 1st after twelve years with the Fletcher-Thompson structural department.

As head of the structural engineering staff, Janssen assumes responsibility for the structural design of approximately $40 million of construction annually. Included in current projects under his supervision is the $25,000,000 development program for Bridgeport's St. Vincent's Hospital, Bridgeport's West Side Middle School, the Administration Building for Western Connecticut State University in Danbury, a 225 car parking garage in conjunction with the Bridgeport Community Hospital Health Center and the Milford Regional Vocational Technical High School, among others.

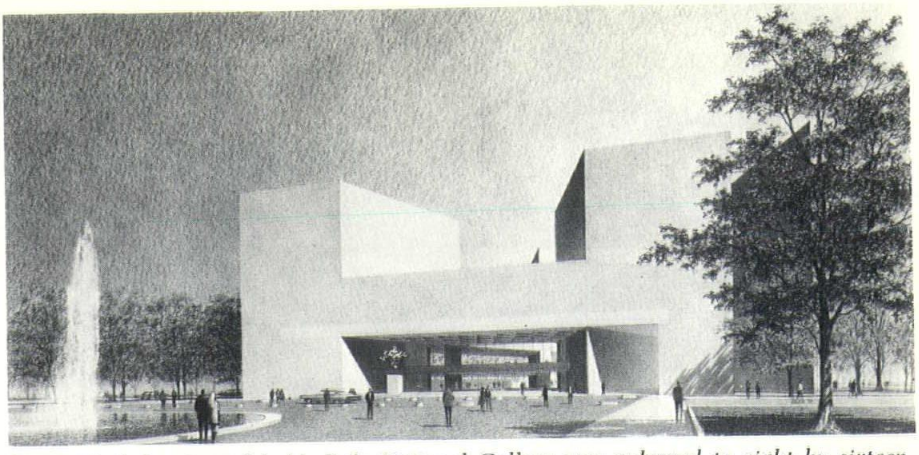
Janssen joined the firm in 1957 and was one of the first Associates named to Fletcher-Thompson. A member of the National Society of Professional Engineers, the Greater Bridgeport Chapter, Connecticut Society of Professional Engineers and a member of Consulting Engineers in Private Practice, he holds a degree in Structural Engineering from the Academy for Technology in Chemnitz, Germany, and a degree in Civil Engineering from the Technical University of Munich. In 1968 Janssen served as a faculty member of the Continuing Education program of the Bridgeport Engineering Institute and in 1971 was named to the Building Board of Appeals for the City of Bridgeport.

Interface Architects Opens Newton Office

The firm of Interface Architects, a new design office, recently opened for business at One Gateway Center over the Mass. Turnpike in Newton. Steve Oles, the Principal Architect, has been active in the architectural profession of the Boston area for a decade, and has a reputation as one of the country's outstanding archi-

(Continued on Next Page)

Steve Oles



Steve Oles' drawing of I. M. Pei's National Gallery was enlarged to eight by sixteen feet for exhibition in the Rotunda of Gallery.

tectural delineators.

Oles has illustrated in addition to his own work that of Gropius, Stubbins, Fuller, Sasaki, Thompson and Sert among others. His most recent delineation work has been with I. M. Pei of New York, for the highly acclaimed National Gallery East Building in Washington. The drawings of this project are currently on display in the main rotunda of the Gallery.

In 1968, Oles' drawing won the Birch Burdette Long Prize, sponsored by the Architectural League of New York. Two recently published books carry his work, they are *Architectural Delineation* by E. Burden (McGraw-Hill) and Helmut Jacoby's *New Techniques of Architectural Rendering* published bilingually by Praeger.

A graduate of the Yale School of Architecture, Oles is registered in Massachusetts, Connecticut and New York and holds the National Council certificate. He has designed residences in Massachusetts, New York and New Mexico, and has recently worked with the M.I.T. Planning Office to upgrade the interior environment of the Institute. Ongoing architectural work is principally in the residential field.

Index To Advertisers

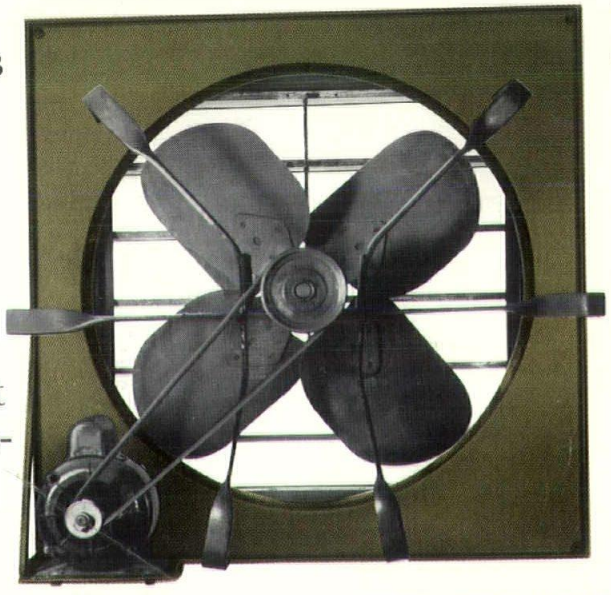
Reflect...

Birth defects
are forever
...unless you help.

give to the March of Dimes

If your building breathes out, it's gotta breathe in.

If you have exhaust fans in your building—or one you're planning—your building breathes out. If you have a chimney or vent stacks—for processing or even space heating—your building breathes out. And, particularly in winter, soon starts gasping for air.



What happens when it runs out of breath?
You get negative pressure in the building. Exhaust systems and burners don't work as well, so heating and processing become less efficient. Doors are sucked tight and drafts are sucked in through every air leak. Employees get headaches and watery eyes. And good old fashioned headcolds from the drafts.

Now there is a cure for the common cold.
It's called a Natural Gas make-up air system. It's a hole in the wall through which your building can breathe in warm, filtered air. Air is inhaled directly through a flame chamber, to create a 100% efficient heating system. And, because Natural Gas is the Clean Air fuel, the products of combustion are not even measurable in the air flow.

Reduced absenteeism, alone, may pay your operating costs.
And improved efficiency of heat and processing equipment gives you added savings. So even the Accounting Department breathes easier.

The Natural Gas Companies of Massachusetts