new england Architect

October 1970

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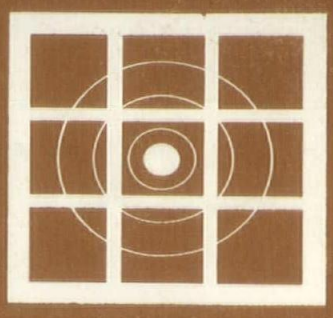
ANALYST
PLANNER
DESIGNER
HUMANIST
ECOLOGIST
URBANIST
BUILDER
ACTIVIST

Challenge, Regeneration
& Continuing Education



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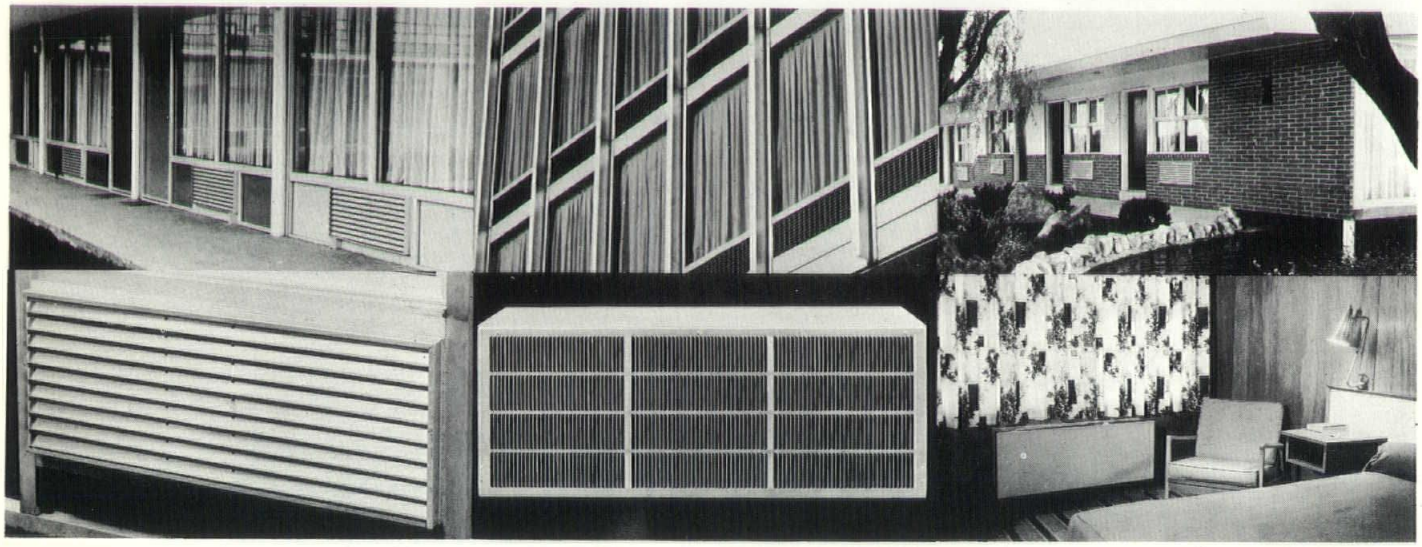

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The list is made up of *Solarban*® installations only, and while it is by no means complete, it does offer a guide to a number of interesting projects in widely scattered locations. For further details, write or call Mr. D. C. Hegnes, Manager, Architectural Construction Service, PPG INDUSTRIES, One Gateway Center, Pittsburgh, Pa. 15222.

ALASKA: Anchorage
International Airport
Architect: Manley and Mayer
PPG Glass: *Solarban (2)*

CALIFORNIA: Los Angeles
Jules Stein Eye Institute
Architect: Welton Becket & Assoc.
PPG Glass: *Solarban (3)*

COLORADO: Denver
Denver Center
Architect: W. C. Muchow Assoc.
PPG Glass: *Solarban (2)*

FLORIDA: Clearwater
Pinellas County Courthouse
Architect: Anderson, Johnson, Henry and Parrish
PPG Glass: *Solarban (2)*

FLORIDA: Cocoa Beach
Cape Canaveral Hospital
Architect: Stevens & Walton
PPG Glass: *Solarban (3)*

FLORIDA: Miami
Mutual of Omaha Regional Home Office
Architect: Houston & Albury Assoc.
PPG Glass: *Solarban Bronze (3)*

FLORIDA: Titusville
Brevard County Courthouse
Architect: Hirshberg, Thompson & Assoc.
PPG Glass: *Solarban (3)*

GEORGIA: Atlanta
Cities Service Building
Architect: Toombs, Amisano and Wells
PPG Glass: *Solarban (2)*

GEORGIA: Carrollton
West Georgia College
Architect: John W. Cherry
PPG Glass: *Solarban (3)*

ILLINOIS: Chicago
Hyatt O'Hare Hotel
Architect: John Portman & Assoc.
PPG Glass: *Solarban (2)*

ILLINOIS: Rockford
Downing Box Company
Architect: Larson & Darby
PPG Glass: *Solarban Bronze (3)*

ILLINOIS: South Chicago
Ardco Corporation
Architect: McCarthy-Hundrieser & Assoc., Inc.
PPG Glass: *Solarban (2)*

MARYLAND: Baltimore
Social Security Administrative Complex
Architect: Myers, Ayers & Saint
PPG Glass: *Solarban Bronze (3)*

MINNESOTA: Duluth
St. Luke's Hospital
Architect: Thomas J. Shefchik & Assoc., Inc.
PPG Glass: *Solarban (2)*

MINNESOTA: St. Paul
Pearson Candy Company
Architect: Cerny Associates, Inc.
PPG Glass: *Solarban (23)*

PENNSYLVANIA: Indiana
East Pike Elementary School
Architect: Robert T. Scheeren
PPG Glass: *Solarban (3)*

SOUTH DAKOTA: Sioux Falls
Airport
Architect: Fritzel, Kroeger, Griffin & Berg
PPG Glass: *Solarban (2)*

TENNESSEE: Bristol
Tri-Cities Airport
Architect: Anderson & Gilliam
PPG Glass: *Solarban (3)*

TENNESSEE: Cookeville
Cummins Engine Company
Architect: Walter E. Damuck
PPG Glass: *Solarban (3)*

TEXAS: Dallas
American Hospital Supply
Architect: Nelson, Ostrom, Baskin, Berman & Assoc.
PPG Glass: *Solarban Bronze (3)*

TEXAS: Houston
One Shell Plaza
Architect: Skidmore, Owings & Merrill and Wilson, Morris, Crain & Anderson
PPG Glass: *Solarban Gray (3)*

VIRGINIA: Fairfax
Fairfax County Governmental Center
Architect: Vosbeck, Vosbeck, Kendrick & Redinger
PPG Glass: *Solarban Bronze (3)*

VIRGINIA: Roanoke
Southwest Virginia Savings & Loan
Architect: Kinsey, Motley & Shane
PPG Glass: *Solarban (3)*

MISSISSIPPI: Gulfport
Mississippi Power Company
Architect: Curtis & Davis
PPG Glass: *Solarban (2)*

NEW JERSEY: Lawrenceville
Public Service of N.J.
Architect: James Laden and Raymond Althouse
PPG Glass: *Solarban (2)*

NEW JERSEY: Wayne
Orban Office Building
Architect: Bernard Rothzeid
PPG Glass: *Solarban (23)*

OHIO: Canton
Kent State University
Architect: Lawrence, Dykes, Goodenberger & Bower
PPG Glass: *Solarban (3)*

OKLAHOMA: Lawton
YMCA
Architect: James Marshall
PPG Glass: *Solarban (2)*

OKLAHOMA: Oklahoma City
Lincoln Plaza
Architect: Halley-Riek and Hester
PPG Glass: *Solarban (2)*

OKLAHOMA: Tulsa
Tradewinds Motel
Architect: Russell Magee
PPG Glass: *Solarban (3)*

OREGON: Portland
Esco Corporation
Architect: Wolff, Zimmer, Gunsul and Frasca
PPG Glass: *Solarban (3)*

PENNSYLVANIA: Allentown
Mack Truck
Architect: Wolf-Hendrix & Associates
PPG Glass: *Solarban (2)*

PENNSYLVANIA: Beaver
Beaver Area High School
Architect: Edwin M. Wallover, Jr.
PPG Glass: *Solarban (3)*

WISCONSIN: Appleton
Wisconsin Wire Company
Architect: Birch-Grisa-Phillips, Inc.
PPG Glass: *Solarban Bronze (3)*

WISCONSIN: Madison
Ohio Products Company
Architect: Weiler, Strang, McMullin & Assoc.
PPG Glass: *Solarban (2)*

WISCONSIN: Milwaukee
South Milwaukee Public Library
Architect: Losch & Haeuser Inc.
PPG Glass: *Solarban (3)*

WISCONSIN: Racine
St. Luke's Hospital
Architect: Hams M. Geyer
PPG Glass: *Solarban (3)*

PPG is Chemicals, Minerals, Fiber Glass, Paints and Glass. So far.

PPG
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new england
Architect

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features

departments

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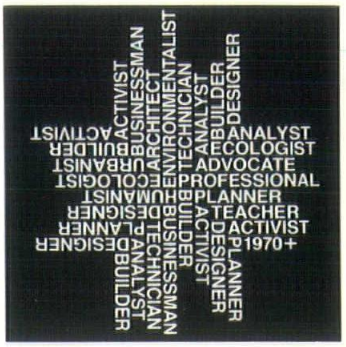
NOTES & COMMENTS

New York and New England States Hold Joint Regional Conference



Architect '70

Architect '70 — the theme of the First Joint New York-New England States Conference to be held October 19-22 at the Laurels in Monticello, N.Y. will be explored in several phases, according to Harvey Kagan, next president of the New York Society of Architects who is Program Chairman.

"The architect of the 70's must relate to developing technology within a dramatically changing society and help to decrease the rate of deterioration of environment," Kagan said. "This is a large order and recent conferences of architects have not dealt face to face with the urgencies involved. We will address ourselves squarely to these problems at our meeting in October."

An address by John Eberhard, Dean of the School of Architecture at the State University of New York at Buffalo, will highlight the AIA Regional Meeting on Monday. Dean Eberhard is a forceful speaker critically aware of the dilemmas facing the architect of today.

Other speakers will include Professor Kiye Izuma, well-known environmentalist and Professor at the University of Saskatchewan; Richard Raditch, President of the HRH Construction Company of New York City, and Ira Robbins, former Director of the New York City Department of Housing.

The American Institute of Architects will be represented by President Robert Hastings, FAIA, President-Elect, Max Urbahn, FAIA, and Vice President George Rockrise, FAIA.

Exhibitors participating in the conference include:

American Biltrite Rubber Co.
American Olean Tile Co.
American Wood Preservers Inst.
Architectural Research Corp.
Armento Architectural Arts, Inc.
California Products Corporation
Celanese Coatings Company
Circle Industries
Construction Adhesives Inc.
GAF Corporation
Georgia-Pacific Corporation
Glen-Gery Corporation
Granwood Flooring Corp.
Hallmark Chemical Corp.
Industrial Acoustics Inc.
JG Furniture Company, Inc.
Johns-Manville Corporation
Lake Shore Markers, Inc.
Libbey Owens Ford Co.
Long Island Lighting, Co.
The Miller Company
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Scientific Products Division
Spancrete Northeast, Inc.
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Stair-Pak Products Co.
Stark Ceramics, Inc.
Styro Sales Company
Terrazzo & Mosaic
Thonet Industries Inc.
Tibbals Flooring Company
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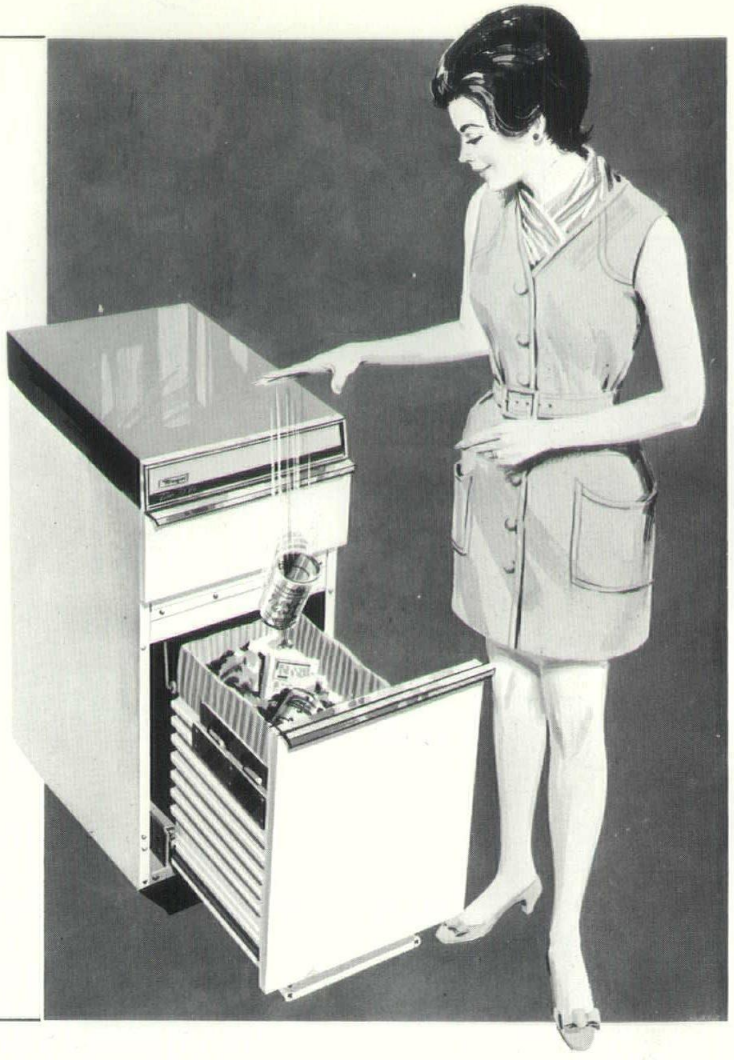

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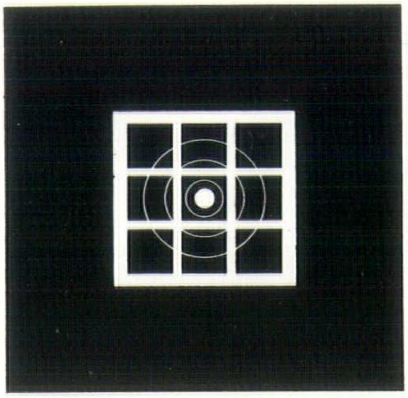
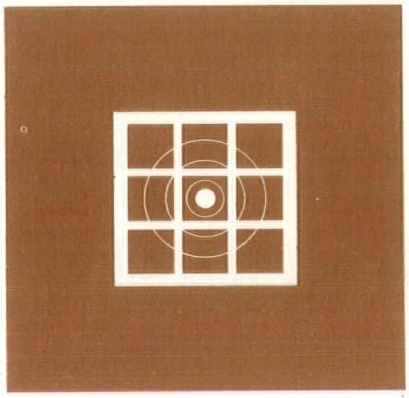




Challenge, Regeneration & Continuing Education

ACTIVIST. . . Businessman . . . Environmentalist . . . Technician . . . Analyst . . . Builder . . . Designer . . . Ecologist . . . Advocate . . . Planner . . . Teacher . . . With each passing day and every technological and social advance, the list of roles the architect is called upon to fill grows longer and the demands on design and allied professionals in the building industry increasingly complex.

"Consequently, the need to regenerate — to keep earning our credentials over and over again, has never been greater," says Harry P. Portnoy, AIA, Chairman of the Committee for Continuing Education at the Boston Architectural Center. "Although the professional is always alert to changes in practice and ideas, it has never been so urgent for him to maintain his level of competence and achievement."

Accordingly, for three years the

Center has demonstrated the relevance of new concepts to the demands of everyday practice by making available to professionals in the area impressive resources for study and investigation.

"Our primary goal has been to remain responsive to the needs of architects, engineers, planners and members of the construction industry who have little opportunity through existing channels to continue their professional development," Portnoy adds. "The programs are intended to confront vital questions, examine alternatives, and learn about the potential of new technology."

The unique status of the Boston Architectural Center as an independent school of architecture has long provided it with the freedom to discover and meet some of the rapidly emerging needs of the profession and the community. At the time of the formation of the Committee for Continuing Education the construction industry was already far behind other forms of industrial production in the development and use of new technology.

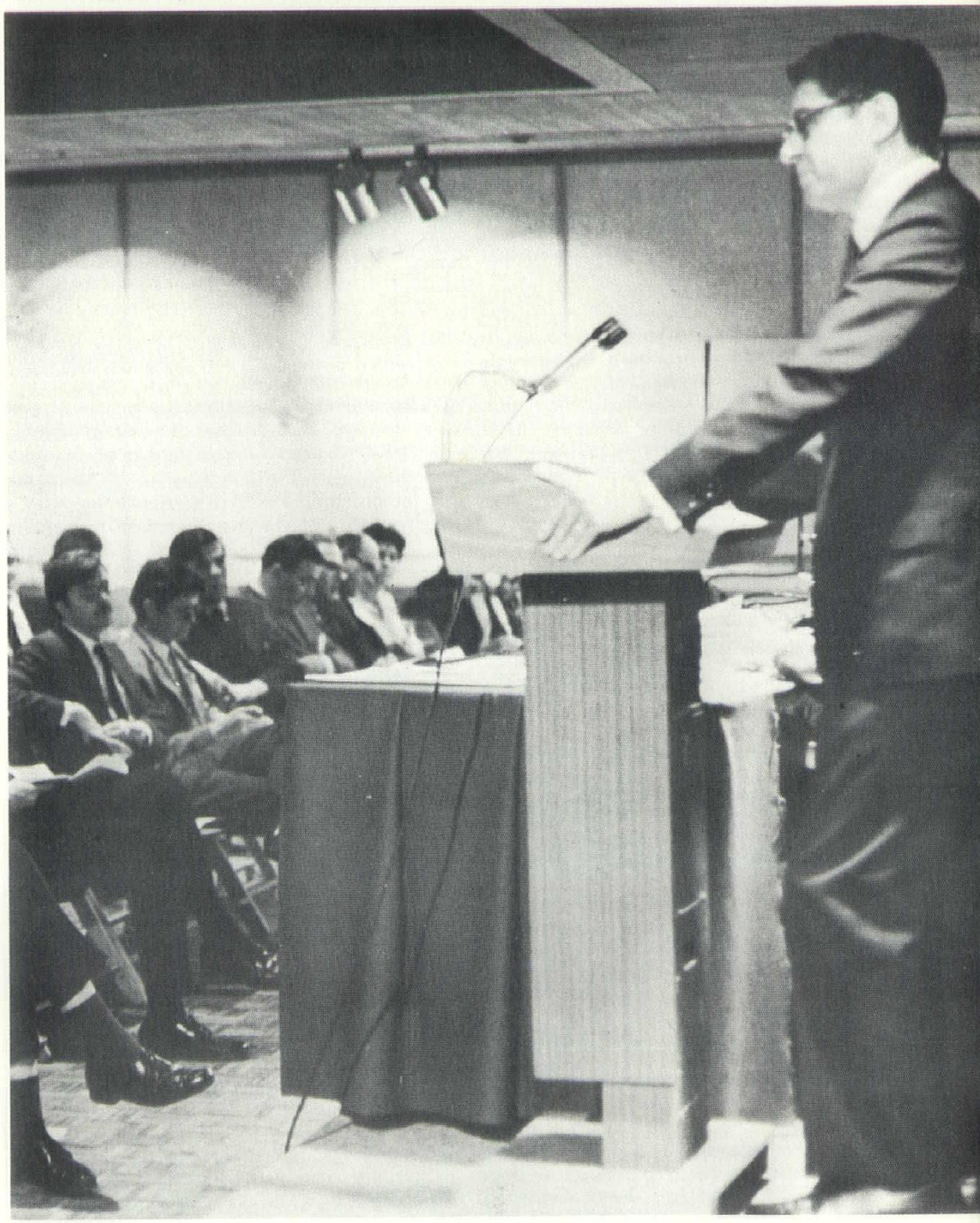
The staff of the Boston Architectural Center became convinced that the practicing architect confronted with the day to day problems of practice and office management, was not in a good position to deal with this crisis. Far from providing a "leadership role" in the building industry, the architect could barely become aware of technological innovations, social changes and the challenging questions which had to be asked of existing institutions.

The architect was desperately in need of a more comprehensive forum than professional meetings for continuing his professional growth and education. As a result of this analysis, the Boston Architectural Center formed a Committee for Continuing Education. Members of the committee included William J. Cavanaugh, Sanford R. Greenfield, AIA, and Marvin E. Goody, AIA, who developed courses that were directed primarily to the architectural community. However, the interest and response from allied groups prompted the committee to alter its initial direction.

The committee's membership has since been broadened to include representatives of engineering societies and the contractor groups. Newest members are Thomas K. Liu, ASCE; Emil Hervol; Armen Gechijian, ASHRAE, and P. J. Maney, AGC.

The Professional Advancement Courses being offered this year include lectures on the New Boston Building Code; Practical Applications of Zoning; Applied Concrete Technology; Computer Applications in Architecture; Planning, Scheduling and Control Techniques for Building Projects; Soil Mechanics and Foundations; Building Systems Design; The Building Professional and The Law; Architecture, Real Estate and Finance; Architectural Acoustics; Architectural Lighting; Fundamentals of Air Pollution Control; Unit Masonry in Contemporary Building Construction. Average cost is $75 for five two-hour lectures.

Deadline for registration is October 30th.



THE BOSTON ARCHITECTURAL CENTER
PROGRAM FOR CONTINUING EDUCATION
FOR THE YEAR 1970-1971:

The New Boston Building Code
Lecturer: Francis S. Harvey, Principal Eisenberg & Harvey, Code Consultants Harvey & Tracy, Consulting Engineers
The new Boston Building Code will become mandatory on 1 July 1971. This course will discuss the philosophy and highlights of the new Code. It will cover both the architectural and engineering aspects. The differences between the new and old Codes will be emphasized. The course will be taught by the person who participated in the writing of the new Code.

° ° °

Practical Applications of Zoning
Lecturer: Joseph J. Berlandi, Attorney-Director Fenway Project, Boston Redevelopment Authority (formerly Director of Zoning, BRA)
This course is designed to provide those engaged in the various Building disciplines with a practical working knowledge of the objectives and applications of zoning. The Boston Building Code will be analyzed as a laboratory case with special emphasis on procedures and current zoning changes as applied to the Boston Development Program.

° ° °

Applied Concrete Technology
Lecturers: Herman G. Protze, Materials Technologist, Consulting Engineer; Emery Farkas, Chemical Engineer, Robert J. Van Epps, Structural Engineer
A series of six two-hour lecture classes presenting the basic principles of concrete for use as a construction material. Discussion in specific detail of the essential requirements of adequate specifications, materials, mixtures, construction methods, job management and practical controls to create an end project which will satisfy the intent of the Architect as to appearance, durability and strength. Specific office, laboratory and job experiences will be cited as examples of both proper and undesirable approaches to typical problems.
Laboratory demonstrations of cast-in-place and precase concretes.

° ° °

Introduction to Computer Applications in Architecture
Lecturer: Theodore H. Myer, Senior Consultant Bolt, Beranek & Newman, Inc., Information Sciences Division
Computer science views architectural practice as a special kind of information processing. Seen this way, many current problems in architecture can be traced to two causes: the growing complexity and quantity of architectural information and the inadequacy of traditional tools for handling it. Beginning with a survey of basic computer technology, this ten hour course will examine computer techniques for processing, storing, controlling, and generating information in all areas of architectural practice. Both current and expected future applications will be considered. Emphasis will be placed on the development of general information systems, applicable throughout the design process. The lectures will be supplemented by direct demonstrations of computer machinery and programs, and by movies.
(All classes will be held at Bolt, Beranek & Newman, 50 Moulton St., Cambridge, Mass.)

° ° °

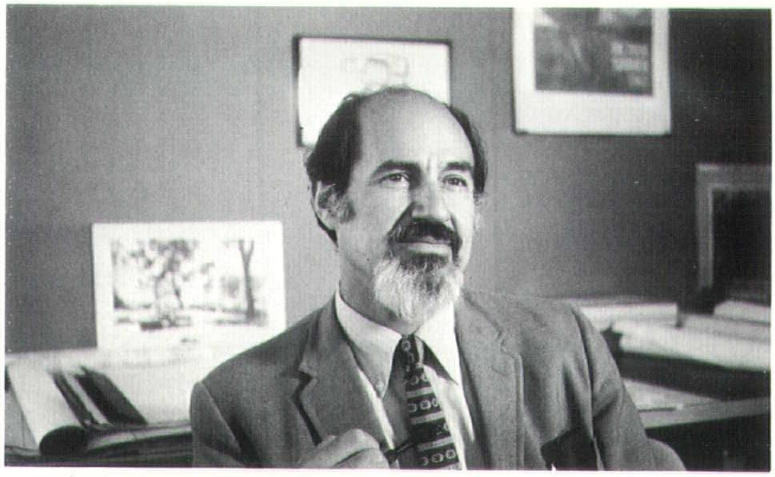
Planning, Scheduling and Control Techniques for Building Projects
Lecturer: Stephen C. Wexler, President Computrol Corporation, Project Management and Control Systems
This course is designed to develop in the participants an understanding and appreciation of network oriented control systems. A unique means of communication via a complete graphic approach will be included. The approach used will be to focus on primary network principles and examples in four phases (planning, scheduling, progress monitoring, and cost control) over the first eight hours. The last session will deal with a discussion of total computer aided program development, advanced applications and slides of scheduling output from an actual project.

° ° °

Decision Making in Structural Design
Lecturers: Neal B. Mitchell, Jr., President, Neal Mitchell Associates; John Adams, Engineer, Neal Mitchell Associates
This course focuses on the understanding and information necessary to make meaningful structural design decisions. A review of statics and strength of materials is the base for a discussion of indeterminate structural action. The behavior of various materials (steel, concrete, wood) is considered and related to various types of structural systems. This course is not intended to be either a review or a general discussion, but rather a careful interrelation of the thinking processes associated with structural decisions. Fundamental material is reviewed, but only in the context of using this information as a positive tool in the design process. Therefore, fairly significant outside study will be required for maximum benefit from this course.

° ° °

Soil Mechanics and Foundations
Lecturer: A. Allen Gass, Principal, Golder, Gass Associates, Consulting Engineers
The course will consist of a series of five lectures, each of two hours duration. The topics to be covered will in general include the principles of soil mechanics, methods of site investigation, foundation



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systems and problems of site development. The objective of the course will be to provide practicing architects with a greater appreciation of problems of site development and of foundation design and construction. Emphasis will be less on the technical details of analysis and design than on the recognition and understanding of soils problems and on the types and costs of solutions to these problems. Illustrative case histories will be freely used and ample opportunity will be given for discussion of problems of particular interest.

° ° °

Building Systems Design

Lecturers: Neal B. Mitchell, Jr., President Neal Mitchell Associates; Albert Filloni, Senior Designer and Jonathan Warburg, Vice President Neal Mitchell Associates

The focus of this course is to investigate the tools, processes and thinking required to participate directly in the design of a building system, and to explore the more active process of direct design participation. Methods and techniques for determining user needs, ordering and structuring information, and manipulating information are utilized to help the participant focus on the design process itself. This approach builds a base for creativity rather than reviewing the work of others, and then measures this review with typical examination processes. The course proposes to identify and come to grips with the real factors that influence building system design.

° ° °

Noise and Vibration Control in Mechanical Systems

Lecturers: Robert M. Hoover and Robert D. Bruce, Senior Consultants, Bolt, Beranek & Newman, Inc.

This ten-hour course presents an in-depth treatment of typical noise and vibration control problems encountered by architects and engineers in current practice. The sources of vibration and noise in mechanical systems will be reviewed to illustrate the wide range of problems as well as the control techniques involved. Successful completion of this course should allow the practitioner to identify and develop solutions for most routine noise and vibration problems in building mechanical systems. (Classes will be held at Bolt, Beranek & Newman, Inc., 50 Moulton St., Cambridge, Mass.)

° ° °

The Building Professions and The Law

Lecturers: Carl Sapers, Esquire and Robert Johnson, Esquire, Hill & Barlow

Part I considers some typical legal problems arising out of the Owner-Architect-Engineer relationship, including standards of professional care expected of the building professions, liability for

Herman G. Protze, Materials Technologist and Consulting Engineer, of Newton Highlands, Mass., has been an enthusiastic supporter of the continuing education program since its inception. His lectures on "Applied Concrete Technology" have been among the most heavily attended.

cost overruns and other recurring problems.

Part II covers common legal problems arising during construction and will include consideration of architect/engineer role, duties of general contractor, lien questions, consideration of remedies when disputes occur and other recurring problems.

Part III applies some of the material and legal techniques discussed to new issues in the building professions, including the legal implications of closed and open systems construction and consideration of the architect as a developer and promoter of real estate transactions.

° ° °

Architecture, Real Estate and Finance

Lecturer: Daniel Weisberg, Asst. Prof. Real Estate, Boston Univ.; Visiting Prof City Planning, MIT; Treasurer, Mass. Real Estate Assoc.

This course will concern itself with real estate investment, both as found in the market and as encountered by the investor. Real estate will be discussed as investment in comparison with other areas of investing. The problems of financing planning, design, tenant selection and management will be explored.

° ° °

Architectural Acoustics

Lecturer: Parker W. Hirtle, Senior Consultant, Bolt, Beranek & Newman, Inc.

A ten-hour course for practicing architects and engineers which focuses on the basic principles governing the behavior of sound in man's environment. Emphasis will be on the relationship of control techniques to architectural design. The basic mechanisms of control of desired, as well as undesired, sounds will be reviewed. (Classes will be held at Bolt, Beranek & Newman, Inc., 50 Moulton St., Cambridge)

° ° °

Architectural Lighting

Lecturer: Jon Birdsey, Partner, Dunbar Assoc., Inc.

This ten-hour course is designed for practicing architects interested in the integration of lighting design in architecture. The basis for programming in the lighting design process is developed. Physiological and psychological criteria for the visual environment are surveyed. Topics include the characteristics of various lighting techniques, methods of calculation and estimation, the organization of data to assist in the creative process, and the use of models and mock-ups for verification.

° ° °

Fundamentals of Air Pollution Control

Lecturer: David Gordon, Director of Research, Eduquip, Inc.

This ten-hour short course is designed to acquaint practicing architects, engineers, and public administrators with the problems and methods of control of air pollution generated from and infiltrating into buildings. Topics surveyed include current design techniques for air pollution control systems, ventilating, incineration and solid waste disposal, stack sampling and environmental surveys, and socio-economic effects of air pollution. The application of pollution control technology to the design of new buildings as well as to the modification of existing facilities are reviewed.

° ° °

Unit Masonry in Contemporary Building Construction

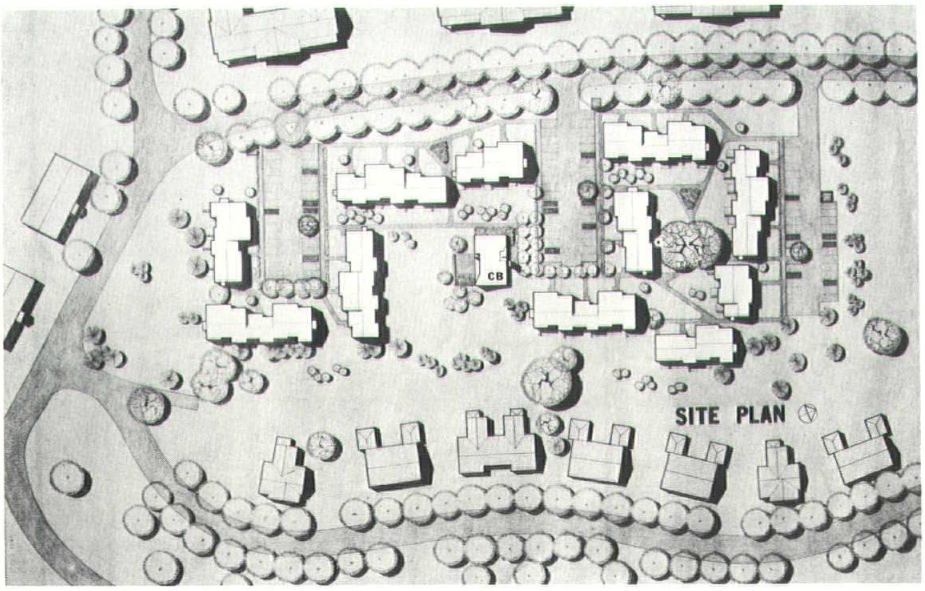
Lecturer: Arthur L. Brown, Jr., President, Weidemann, Brown Inc., Consulting Engineers

The course will stress the details of material selection, design, specification and construction procedures that the Architect or Engineer must understand to design economical and trouble-free buildings of unit masonry.

The course will consist of lectures on the following topics:

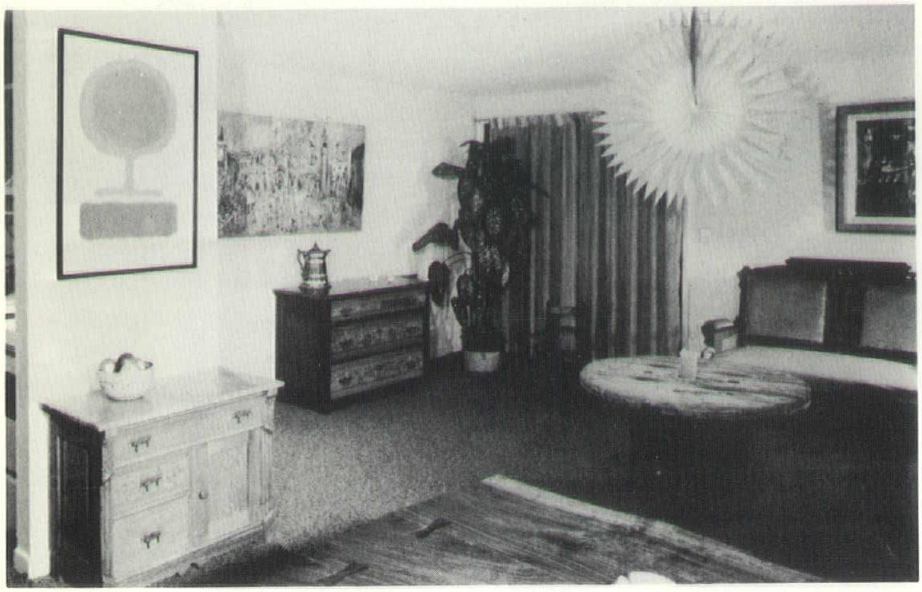
1. Building code requirements and materials standards, including a discussion of the new Boston Code and the BOCA Code.
2. Engineered masonry including non-reinforced and reinforced multi-story bearing wall construction.
3. Detailing masonry for watertightness, durability and differential movement.
4. Industrialized field construction for optimum economy.
5. Future developments, including prefabrication and high strength mortars.

University of Vermont



THE University of Vermont Housing Development, recipient of an Honorable Mention Award in the 15th annual Homes for Better Living program sponsored by the American Institute of Architects in cooperation with *House & Home* and *American Home*, consists of a diversified group of living units designed for married students.

The site is an enclosed area containing 6.4 acres of land, located about four miles from the main campus in Burlington. The residences are located at Fort Ethan Allen on the Colchester side of the Essex-Colchester boundary line which goes through the fort. Both the campus and the site are located close to interstate accesses. Massive 'military style' housing built in the 19th century surrounds the site.



Julian Goodrich Architects, Inc.
South Burlington, Vt.

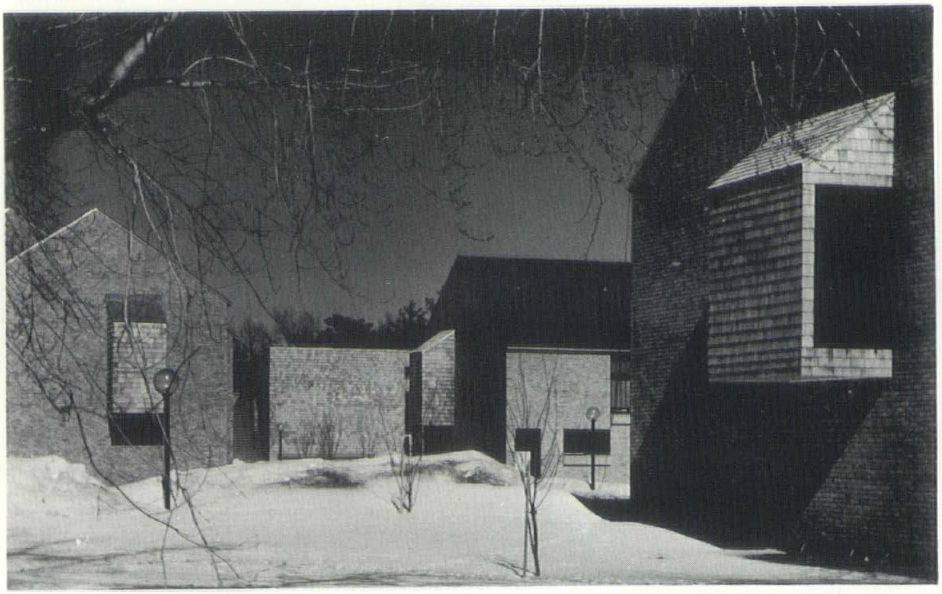
Honorable Mention
AIA Homes for Better Living Awards Program
Sponsored by American Home and House and Home

Housing Development

Colchester, Vt.

The housing units have been grouped into large blocks enclosing 'external' spaces for parking and 'internal' traffic-free common spaces for living and recreation. All existing planting has been retained. The expression is massive to harmonize with the adjoining architecture. Within this concept the forms have been broken down by the use of modulation, projections and simple detailing to stress an intimate and more human scale for living today.

The student 'village' includes a community center at its hub for group activities and laundry service. The development contains 33 town houses, 42 two-bedroom and 14 one bedroom apartments. Each unit is complete with kitchen equipment, carpeting, storage space and

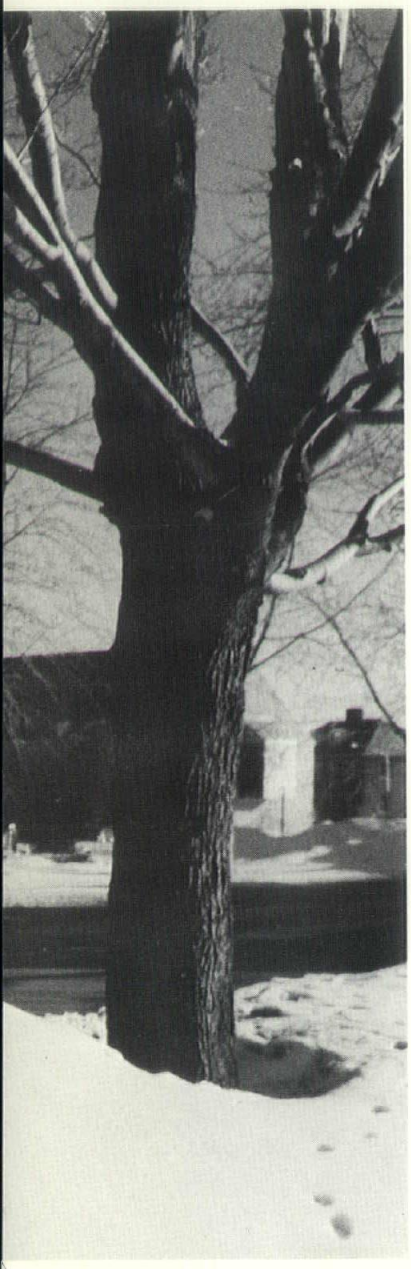


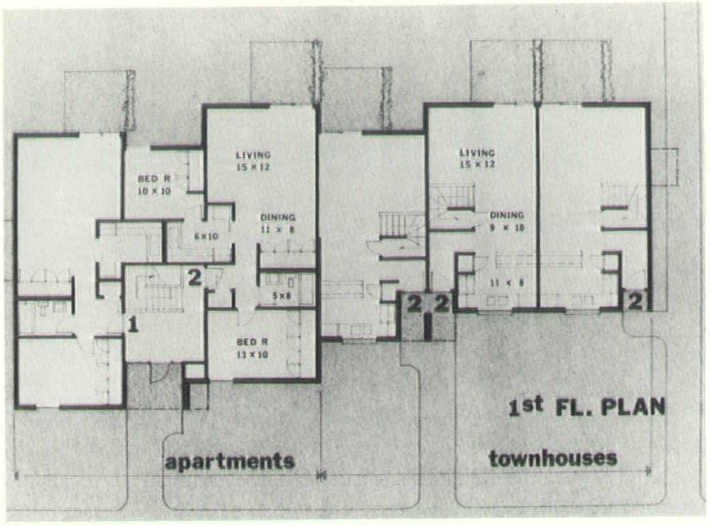
The eleven apartment houses and the community center are named after Vermont counties. A residence hall on the main campus is already named Chittenden and the name Grand Isle, the county with the least population, has been deferred until additional units are built. The two-bedroom apartments are available in both town and garden styles; the one-bedroom apartments are available in the garden style. Each unit is furnished with an electric stove, refrigerator, kitchen cabinets, garbage disposal and wall-to-wall carpeting. Each has a private entrance and individually controlled electric heat.

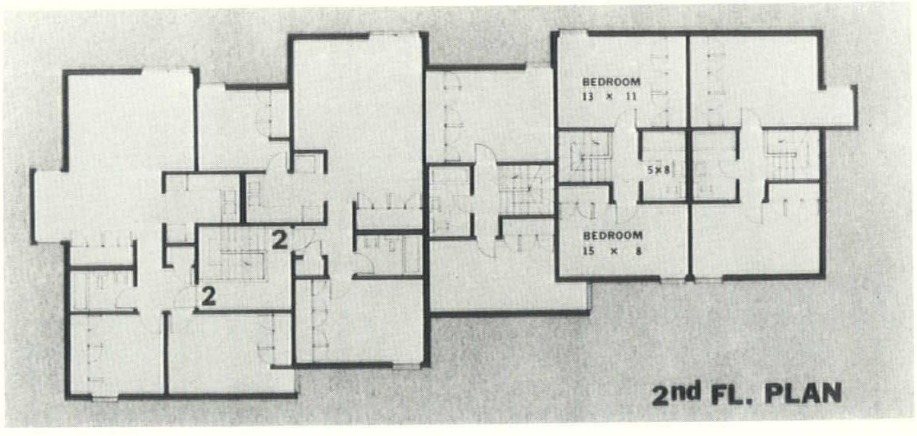
electrical heating. Only minimum furniture is required by the students. Total site density is about 14 units per acre.

Conventional local construction methods were used to eliminate as many building problems as possible, and to provide a fast contract completion. The project was started on the drawing board in February 1969 and completed in November 1969. General contractor was the John Goodrich Construction Co.

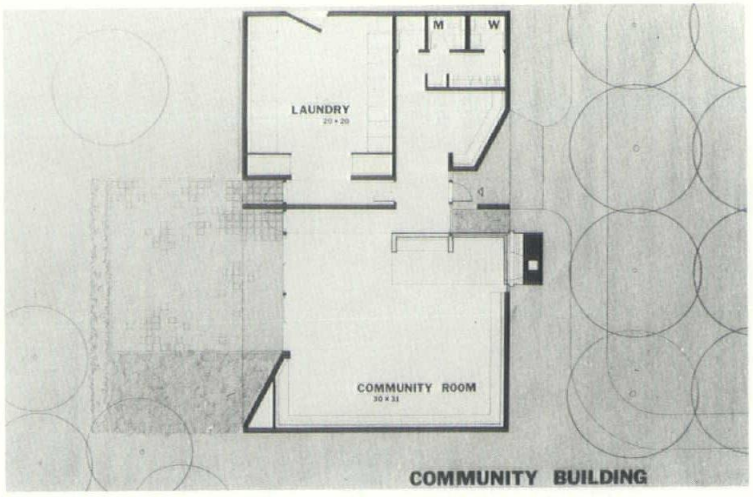
Cost of the 89 housing units ($13,521 per unit) and the community building was $1,333,000. Total project cost, including architects' fees, was $1,413,000.

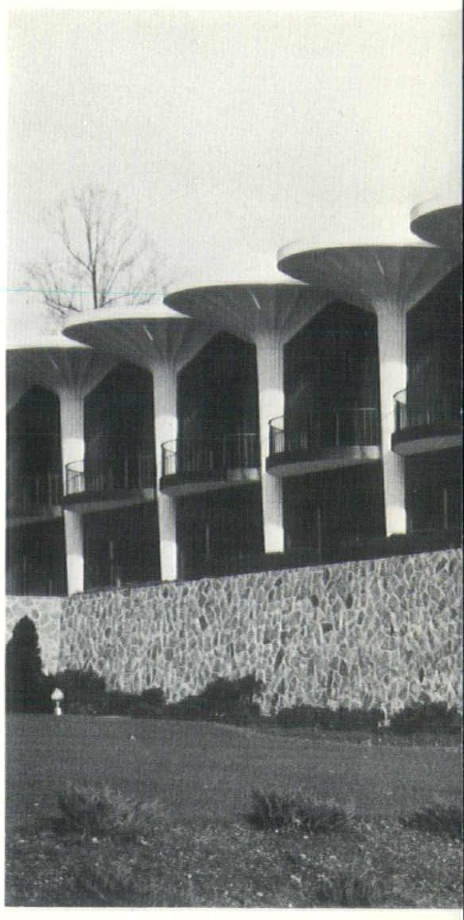






A centrally located service building (floor plan at right) contains washers, dryers and vending machines.



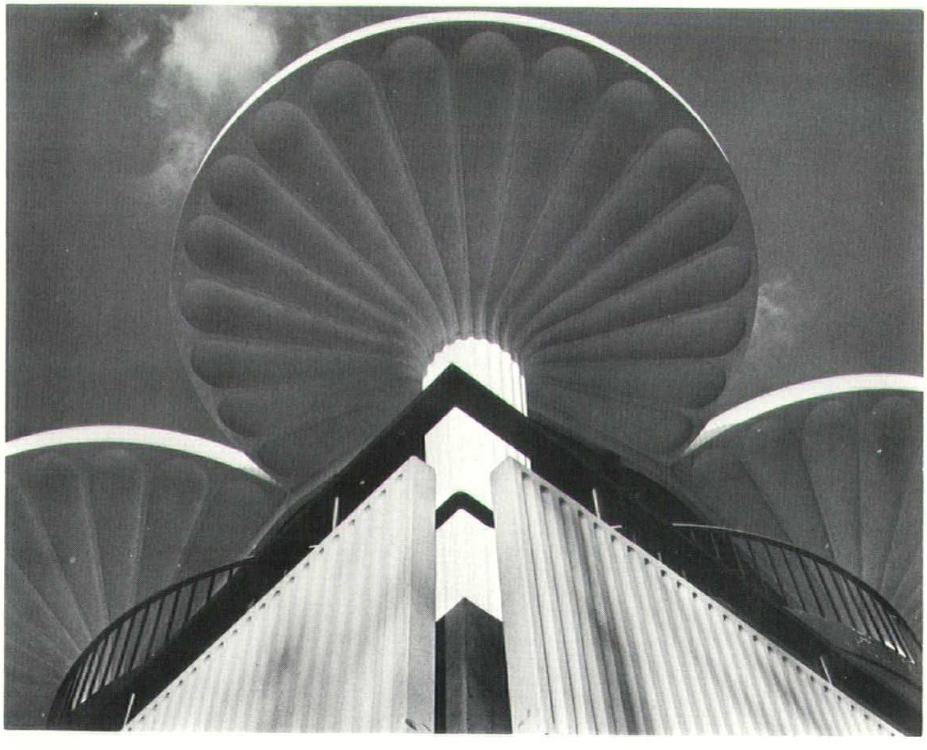


The Flintkote Building

Harrison, N.Y.

Victor Bisharat — Stamford, Conn.

1970



THE corporate Headquarters Building designed by architect Victor Bisharat, of Stamford, for the Flintkote Company of White Plains, N.Y., has been named a winner in the 1970 White Cement Architectural Awards Program "for distinguished architectural design in white cement concrete completed during 1969."

Eleven winners were selected regionally by a jury of architects and engineers. To be eligible, a building must feature white cement concrete as the principal material structurally or architecturally though it may be precast, cast-in-place, masonry, stucco, marblecrete, sgraffito, etc.

A separate award will be announced at a later date for the

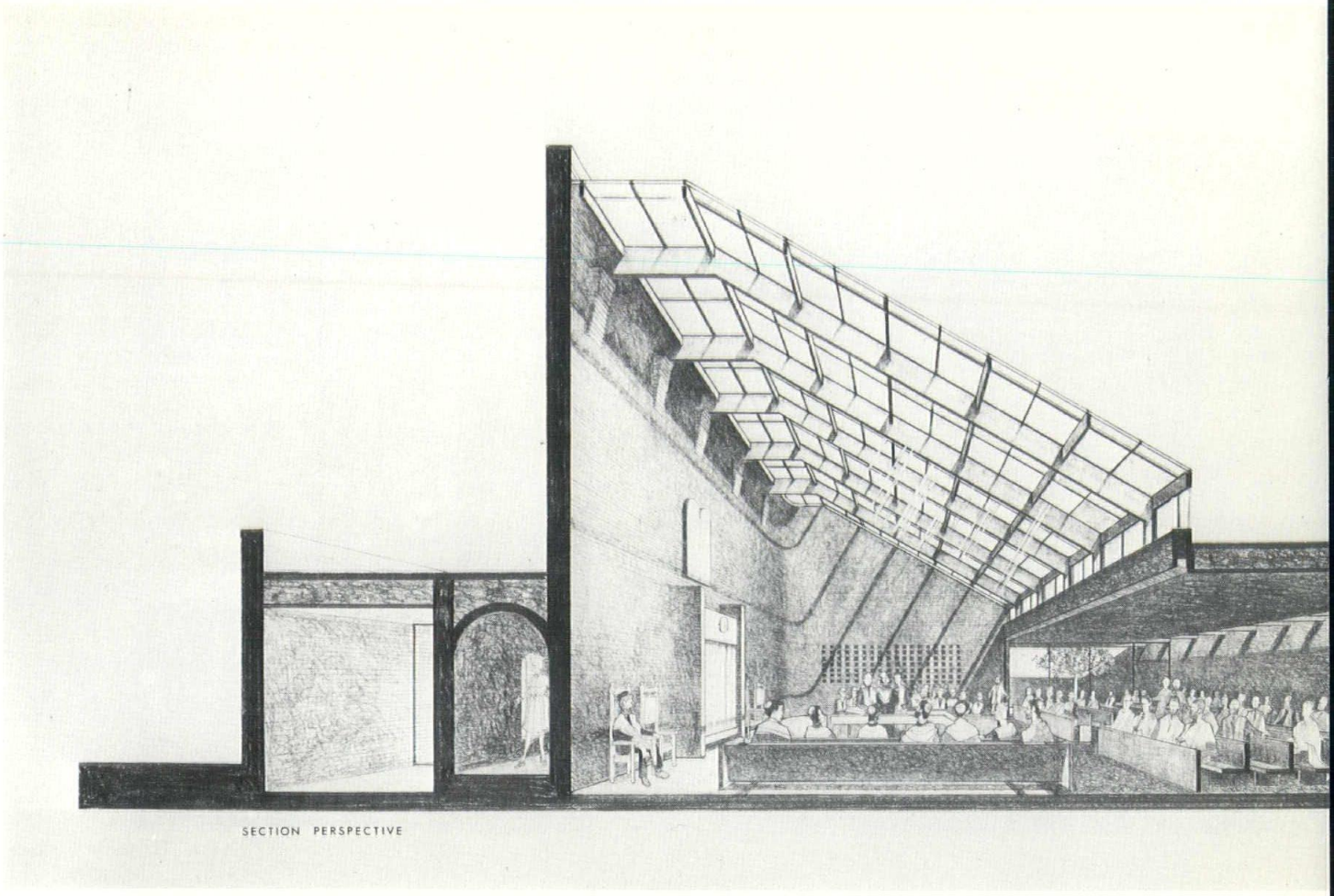
White Cement Awards

use of white cement terrazzo. This award is made annually to the contractor who makes the winning installation, and is presented at the annual convention of the Terrazzo Contractors Association.

Entries must be located in the United States and designed by architects having offices in the U. S. To be eligible, the projects must have been completed and occupied during the calendar year.

The Annual White Cement Architectural Awards Program is sponsored by the White Cement Marketing Group, Portland Cement Association, to recognize excellence in architectural design and to acquaint the design professions and owners with the many uses of concrete made with white portland cement.

A piece of sculpture has been installed in the atrium pool since this photo was taken.



SECTION PERSPECTIVE

Boston Synagogue

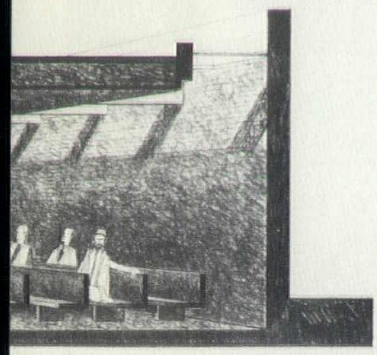
Childs Bertman Tseckares Associates, Inc. — Boston

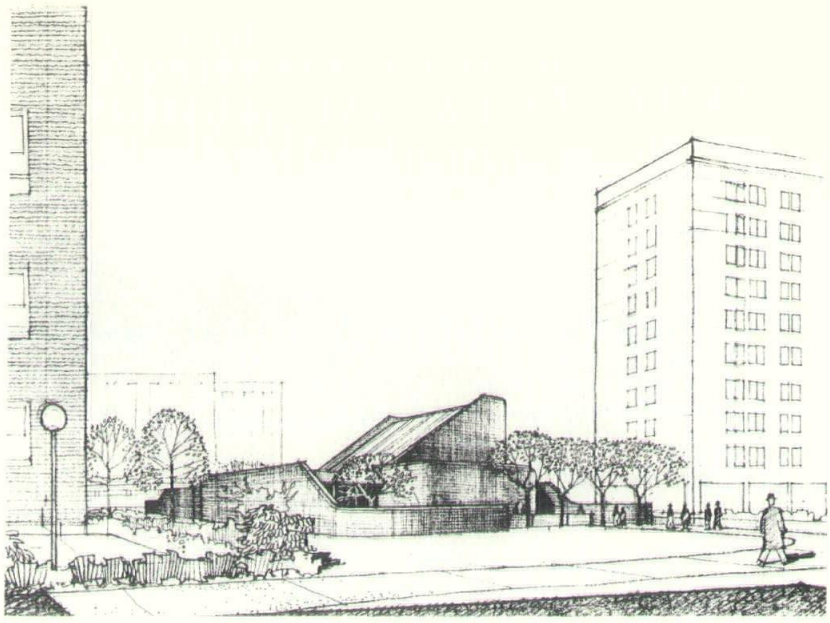
THE Boston architectural firm of Childs Bertman Tseckares Associates, Inc. has designed a new orthodox synagogue for the Beth Amedrish Agudal Beth Jacob Congregation to serve not only as a meeting and worshipping place for Jews living, working and visiting in the downtown Boston area, but also as a memorial to the original West End Jewish Community uprooted by the West End Urban Redevelopment Project. The Synagogue is to be located in the Charles River Park complex. The site is a gentle sloping treeless one surrounded by high-rise apartment buildings 16-22 stories high. Construction is expected to begin early this spring.

The architects conceived of the building as a piece of sculpture consisting of interlocking garden walls positioned and shaped according to the movement of pedestrians. Some of these fluted concrete block walls enclose landscaped areas. This concept is intended to relate the building to the park-like setting of the West End and also to provide the people living high in the surrounding buildings with a pleasing view of the roof of the Synagogue in harmony with the landscape.

Doors and windows are treated as abstract slots between the walls so as to prevent a correlation with surrounding high-rise buildings. The architects felt that if the scale-giving elements such as doors and windows were the same sizes or shapes as those of the huge apartments, the tiny mass of the Synagogue would seem toy-like in comparison.

The sequence of spaces (open sky, middle size courtyard, intimate entry) was deliberately planned to help the participant change his pace from that of noisy city routine to one of inner thought and worship. This "scaling down" is accomplished also through a series of transitional events — changes in level, screens of trees, changes in direction, changes in light quality, etc. The climax of this movement occurs in the sanctuary which is bathed in diffuse natural

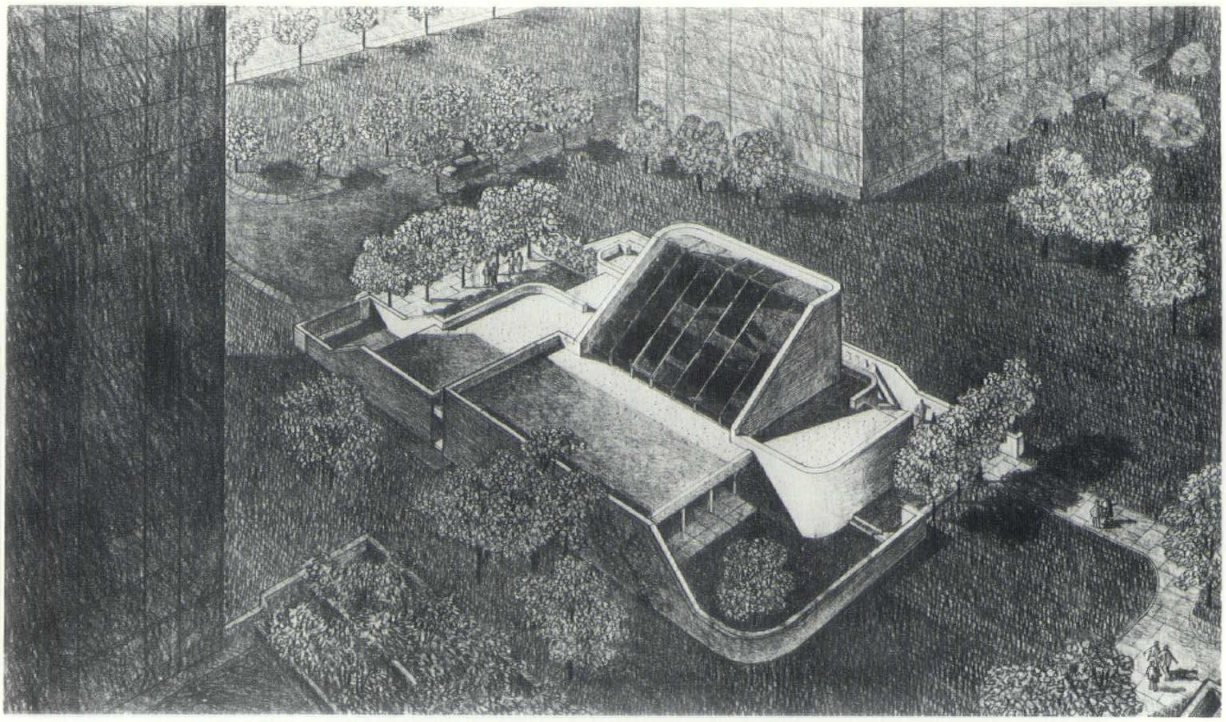




light provided by a translucent plastic roof.

Besides relating to its urban surroundings yet providing the atmosphere necessary for spiritual solitude, the building must house such diverse activities as daily services for 60-70 men, large High Holiday congregations of over 200, meetings, lectures, weddings and social gatherings of varying numbers. Other concerns solved by the architects are religious (separate seating for women, ceremonial courtyard) as well as practical (administrative offices, kitchen, access to the building by foot, car, and catering truck.)

Through the use of similar materials and details and by careful shaping of forms, the sanctuary and social hall can function together as one totally unified space or separately as individual spaces via the use of a sliding partition. A ceremonial courtyard used during certain religious holidays also becomes an extention of the social hall during pleasant weather.



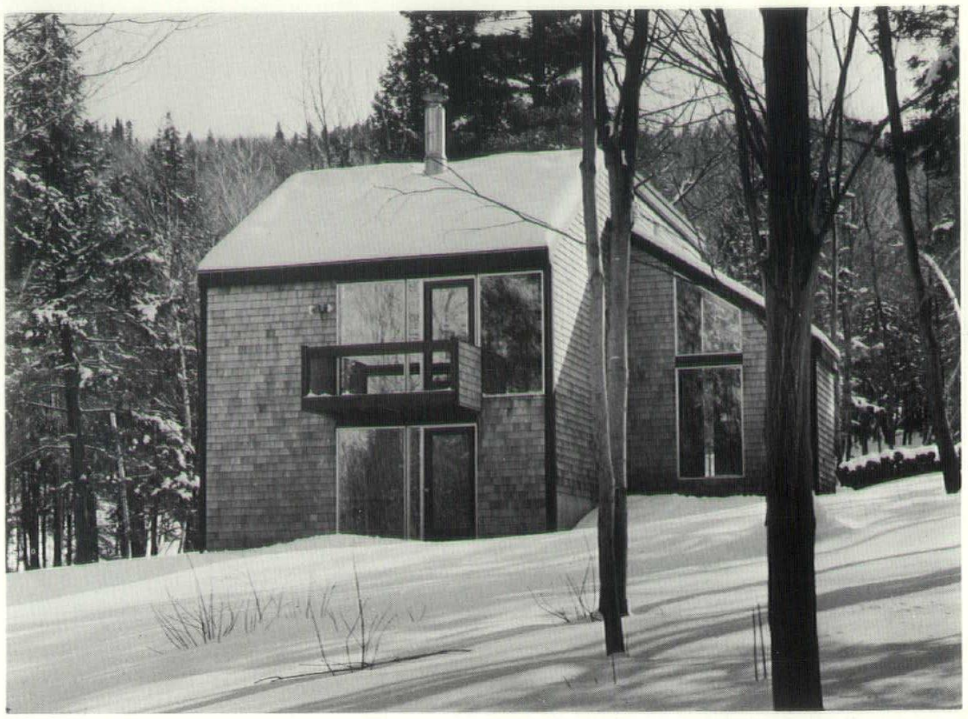
Mountain House

Francestown, N.H.

Brett Donham — Boston

ONE of four New England projects to receive awards in the 15th annual Homes for Better Living Program sponsored by the American Institute of Architects in cooperation with *House & Home* and *American Home*, the Crotched Mountain "merchant-built" house designed by Brett Donham of Boston is one of a series of modular houses, all variations of a theme, planned for a year-round vacation community in southern New Hampshire.

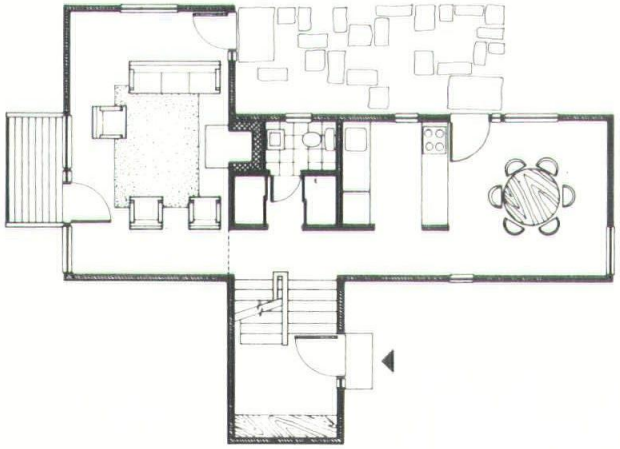
In principle, the house consists of a number of three dimensional modules, 12 feet wide by 20 feet long by 8 feet high, sized to be able to comfortably contain a living room, or a kitchen-dining room, or 2 bedrooms, or a bunkroom, or a children's recreation room. These modules are placed together in a number of ways allowing for a greater variety of orientations, exposures, views, site conditions.



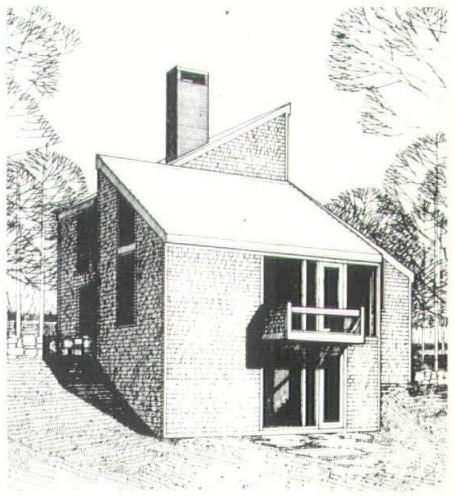
Honorable Mention
AIA Homes for Better Living Awards Program

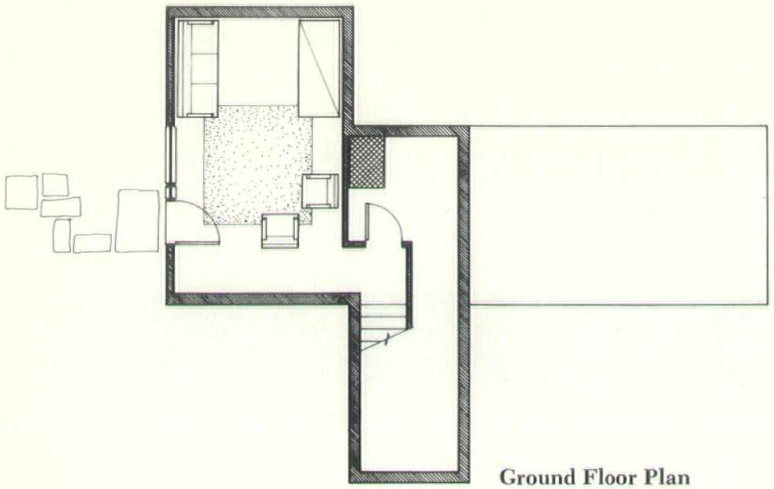
The design anticipates the time when the modules will be completely factory fabricated as boxes and trucked to the site intact and placed together. This first house was prefabricated of 4-foot wide by 8-foot high wall panels with all roof and floor joists precut and assembled as a conventional prefab.

Connecting these units is the "irregular" element containing the stairs and landings which adjusts to the slope of the site. It also contains the plumbing and all other penetrations such as heating, fireplace opening, etc. Thus all special work is confined to the central element and the "regular" units are free of any interruptions. The units

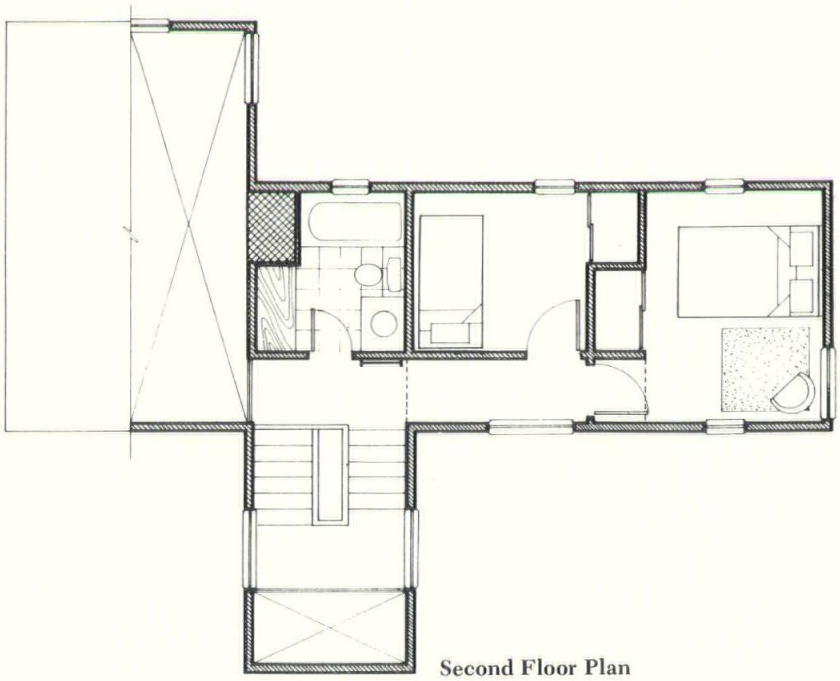


First Floor Plan





Ground Floor Plan

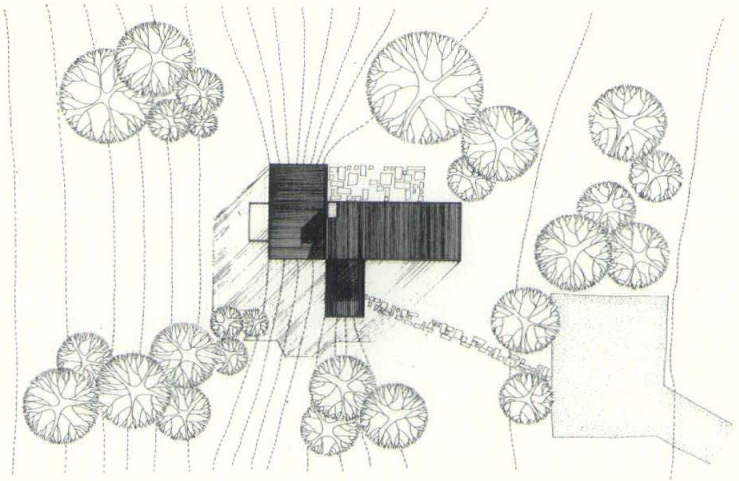


Second Floor Plan

can be combined with the central element in a variety of ways to produce houses similar in general character but quite different in particular aspects.

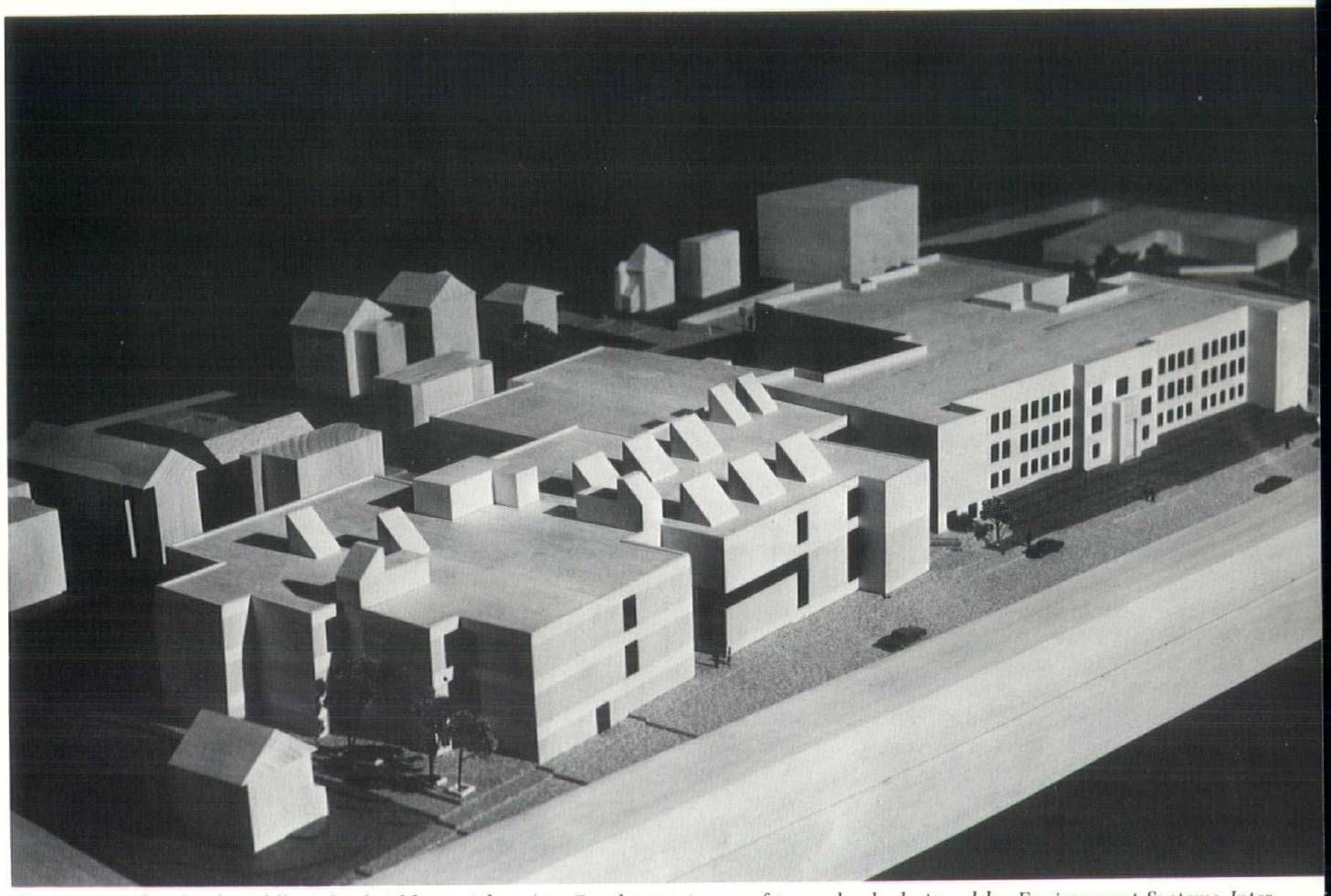
All exterior surfaces are glass or red cedar shingles left to weather. All trim is painted white or other primary colors. Interior surfaces are dry wall or matched boards on the walls and oak flooring or carpeting on the floors. The pitched roof forms and the exterior shingles, which within the confines of the system could be any slope or material, were selected on the basis of sympathy with the local existing conditions of rural New Hampshire.

Two other concerns shaped the design of this house. One was the desire to produce a house with a family of forms evocative of the kind found in the sheds and barns of rural New England, forms that would also produce a variety of appearance within the same visual framework. The second concern was to make the modules and their relationships so easily understood that the developer, with the aid of a block model, could actually design the houses for particular sites with his clients.



Site Plan

System Building for Schools i



The Grover Cleveland Middle School Addition (above) in Dorchester, is one of two schools designed by Environment Systems International, a corporation owned jointly by Earl R. Flansburgh & Associates, Inc., of Cambridge, and R.V.W.J. Systems of Toronto and Albany.

IN common with most cities in the United States, Boston faces severe problems in keeping pace with its increasing need for school facilities. The past half century saw a singular lack of activity in this area, with the result that the administration of Mayor Kevin H. White found itself faced with a stock of aging school buildings, half of which are 100 years old. In order to revitalize Boston's school system, Mayor White has initiated the largest school building program in the City's history. The Department of Public Facilities will have twelve schools under construction by the end of 1970, with 30 more planned for the near future.

This ambitious program comes at a time when building costs in the City are escalating alarmingly. Public Facilities Department Director, Robert T. Kenney, an ex-financial analyst, is particularly concerned to hold these costs down. His plans for joint occupancy and air rights schools are aimed at reducing real estate costs, but equally as important is the need to reduce the cost of the physical plant itself.

Conservative estimates indicate that construction costs in the City have risen more than 25% in the past two years. This inflation results both from a shortage of skilled labor, causing rapid increases in wages and declining productivity, and from a substantial increase in the volume of construction, which has had the effect of weakening competition among general and sub-contractors. Contractors handling the $5-$10 million range of jobs have sufficient work to be selective in their bidding. Whereas in 1968 projects in the $5 million range normally attracted six or eight bids, in 1969 owners of such projects could not expect more than two or three, and often fewer for schools.

Boston: The Bostco Program

by Nicholas Kuhn, Project Coordinator

Problems of cost are paralleled by problems of education programming. With the rapid development of educational thinking, and its continued flux, it is no longer possible (nor is it desirable) to predict with any certainty what will be required of education buildings in future decades. For this reason, the importance of an adaptable physical plant is now widely recognized as a primary objective of school building programs.

These concerns, coupled with the desire to reduce construction time, have led a number of school boards to develop system building programs. One aim of these systems programs has been to utilize more effectively the expertise of industry in the design process. This has been done by substituting tightly written performance specifications for the conventional working drawing package. This allows the manufacturer, who is always better informed within his particular sphere than the architect, enough leeway to develop a component sub-system which uses his resources most efficiently, and therefore economically.

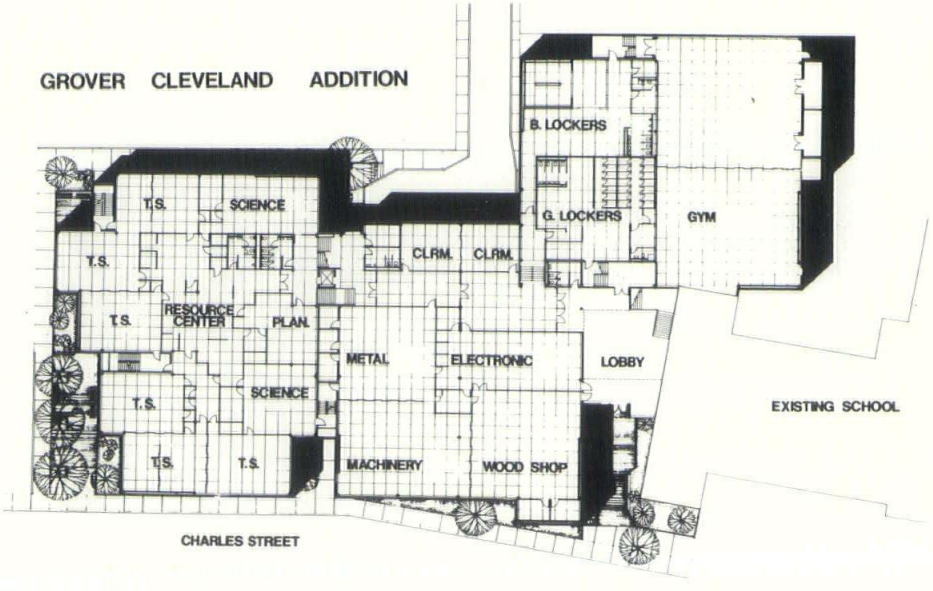
There are two further significant advantages to be gained from such an approach. The assurance of a market for large quantities of standard components makes available the economies of mass production, an economic advantage previously only available to highly mechanized industries. Secondly, the use of pre-coordinated factory produced components results in substantial savings of on-site construction time.

As Robert T. Kenney, Public Facilities Director, sees it, "Systems construction offers the most promising resolution of the educational, programmatic and cost problems which beset large city school building programs."

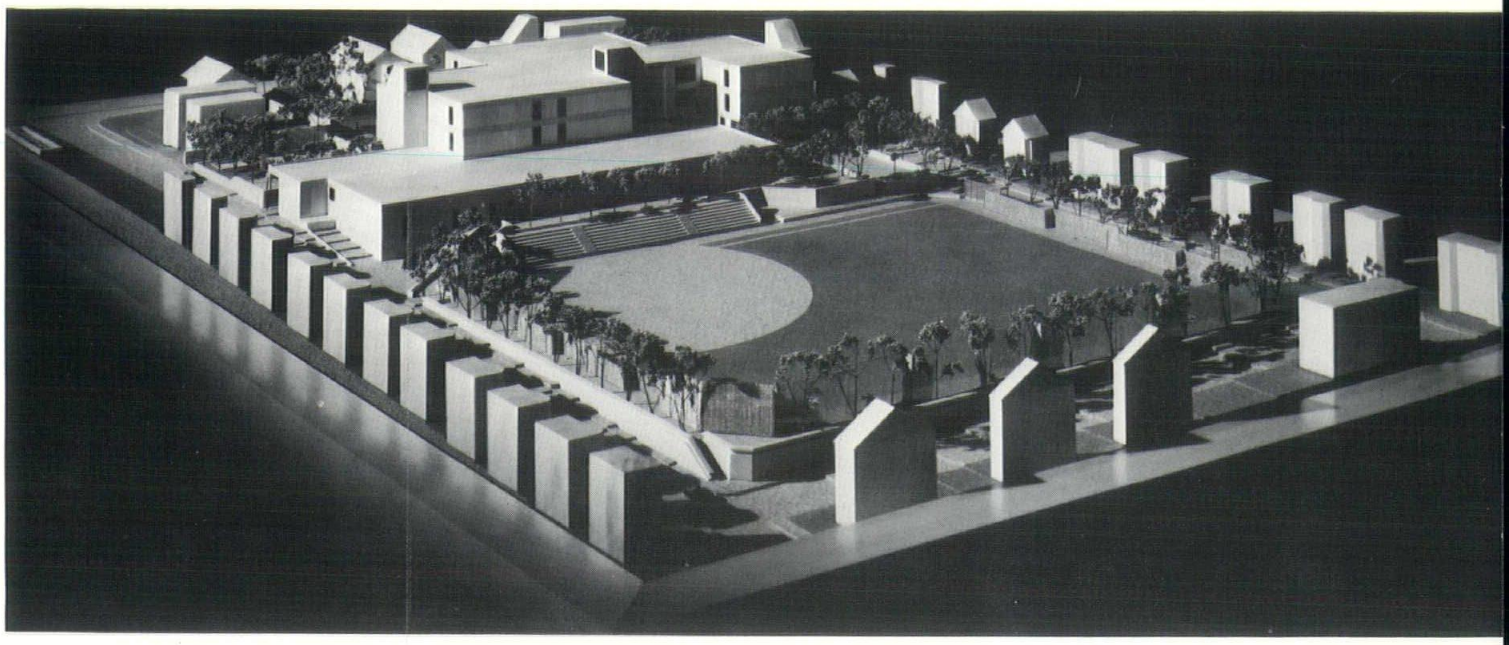
The SCSD Program in California (School Construction Systems Development), which began development in the early sixties, was the first major program of this kind in the United States. Several systems programs have since evolved, of which the SEF system in Toronto (Study of Educational Facilities) is perhaps the most significant.

Since the SEF system has been developed for climatic conditions similar to our own, it was decided to use the SEF experience as a starting point for the development of Boston's own system building program. For the past year the City of Boston's Public Facilities Department, in collaboration with its consultants, Environment Systems International (a corporation owned jointly by Earl R. Flansburgh & Associates, Inc. of Cambridge, and R.V.W.J. Systems of Toronto and Albany) has been involved with the development of the BOSTCO Program. The BOSTCO Program is conceived within the same general framework as the SEF program and SCSD before it. Its goal is to elicit response from industry to closely written performance specifications. As with the earlier systems programs, this response will take the form of a number of compatible prefabricated sub-systems, capable of rapid erection in a great variety of possible configurations.

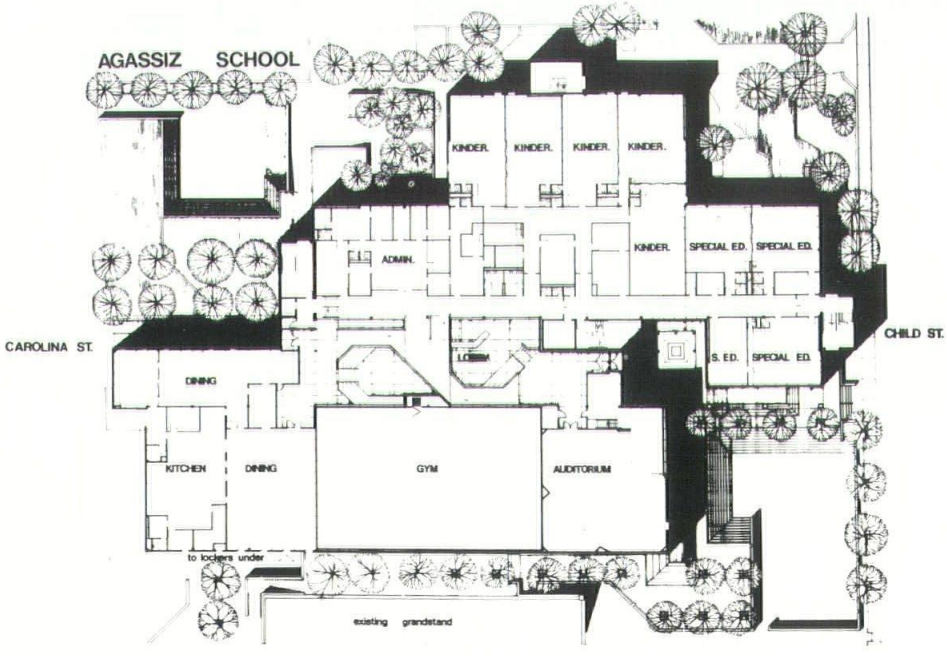
More specifically, the BOSTCO program has been organized into two phases, the first of which is now underway. The first phase involves two demonstration schools, which will start construction in the fall of this year. These schools will be built using components developed for the SEF system in Toronto, with some modifications where SEF sub-systems are in conflict with local codes. This



It is expected that the Agassiz Elementary School in Jamaica Plain (below) will realize substantial cost savings over conventional schools designed to the same educational specifications. It is scheduled to open in September 1971.



first phase is intended to demonstrate the feasibility and economic advantage of system building for Boston's schools, and as such serves as a testing ground for the full-scale systems program which the City is now undertaking. These two schools, the Agassiz Elementary School in Jamaica Plain and the Grover Cleveland Middle School Addition in Dorchester, both designed by Environment Systems International, are using the experience gained in Toronto both for design and construction procedures. It is expected that these schools will realize substantial cost savings over conventional schools designed to the same educational specifications. It is also expected that the systematic organization of construction procedures, and the use of prefabricated components, will result in considerable savings in time; both schools are scheduled to open in September 1971.



With the first phase of the BOSTCO program well underway, the Public Facilities Department is now structuring the second track of activity. This second track represents the main effort of the program and builds on the experience of both the SEF systems development in Toronto and the first phase of the BOSTCO program itself.

The scope of the second track is considerable, involving 6 schools with a projected total enrollment of 8,000 students, and a total area of 1,000,000 square feet. Using as a foundation the SEF Documents, a new set of performance specifications is being developed, reflecting both local code requirements and the educational requirements of the Boston School Department. It is expected that bidding of these performance specifications will take place in the summer of 1971.

In order to establish the City's own capability in the handling of this and future systems programs, the Public Facilities Department is setting up a systems group under the guidance of its Chief Architect,

Richard Joslin. As part of the second track of the BOSTCO program, the PFD systems group will undertake the design of the first of the six designated schools, since the design of this model school will run parallel to the development of the performance specifications on which bidding is to be based. The other five schools will be designed by private architectural firms within guidelines set down by the PFD systems group. Organization of the program, scheduling, legal and bidding strategies will be a joint effort of the PFD systems group and their consultants. Preliminary design of the schools forming part of this package will begin early in 1971.

A BOSTCO project bulletin will begin publication towards the end of this year, with the object of establishing and maintaining essential communication between the project team and the broad range of industrial, professional and community interests. This bulletin will be published on a bi-weekly basis and be available to all interested parties.

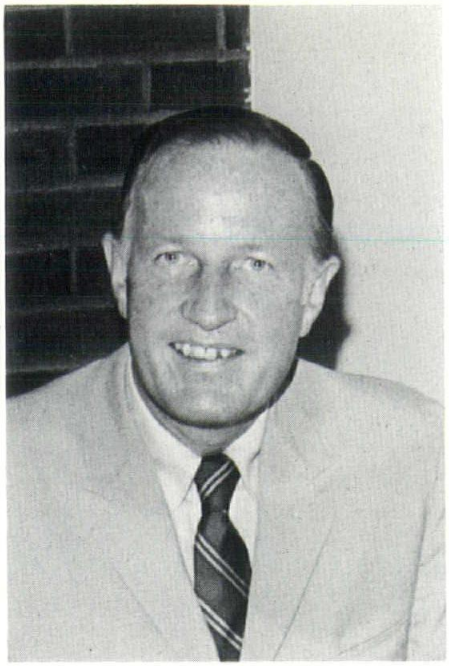
PCA Moves Office to Chestnut Hill

The Portland Cement Association has moved its offices from downtown Boston to 850 Boylston Street, Chestnut Hill.

James P. Archibald is managing engineer for the office which serves Maine, New Hampshire, Massachusetts, Connecticut and Rhode Island.

The Portland Cement Association, in operation since 1916, is a nonprofit organization established to improve and extend the uses of Portland cement and concrete. It is supported voluntarily by its member company cement manufacturers throughout the United States and Canada.

The PCA office in Chestnut Hill serves as a clearing house for concrete design practices and is a source of up-to-the-minute information on new and improved construction methods.



James P. Archibald

Fletcher - Thompson Opens Danbury Office

Fletcher - Thompson, Inc., of Bridgeport, has opened a branch office at 68 West Street in Danbury, Conn., offering architectural design and facilities engineering services.

The architectural design office will be under the direction of Chido S. Licciardi, AIA. Mr. Licciardi is a native of Danbury and attended Danbury schools. He has been with Fletcher-Thompson since 1956.

The facilities engineering division is comprised of a group of specialists in industrial management and planning and is directed by Axel Bruzelius, P. E., Mechanical and Electrical Engineer. Mr. Bruzelius is a graduate of the Royal Institute of Technology in Stockholm, Sweden, and has spent over 25 years as a company executive, management consultant and facilities planner, both here and abroad.

Lighting Forum

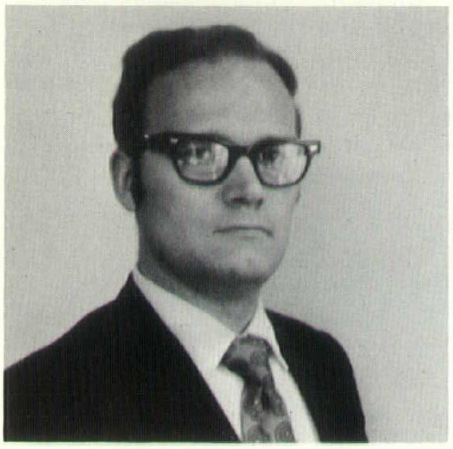
A kick-off meeting has been scheduled for October 27th by the newly formed Designers Lighting Forum, New England Chapter (Illuminating Engineering Society).

The program, entitled "Lighting Facts and Fancies," will be offered from 7-9 p.m. at the Cambridge Electric Light Company, 26 Blackstone Street, Cambridge, Mass.

Guest speakers will include Saul Arvedon, New England Consumer Products Sales Manager, Lightolier, Inc.; Richard A. Johnson, New England District Representative, Lamp Division, Sylvania Lighting Products, Inc.; and Dr. Robert E. Levin, Advanced Research and Development Engineer, Sylvania Lighting Products, Inc.

DLF Board Members are Chairman, Gertrude Winchell, Cambridge Electric Co.; Vice-Chairman, Robert Hart, Lightolier, Inc.; Treasurer, John Bradley, Westinghouse Electric Corp.; Recording Secretary, Maryann McKay, New England Tel & Tel; Corresponding Secretary, Janet Bolles, Brockton Edison Co.; Reception Chairman, Mary Gleason, Graybar Electric Co.; Publicity Chairman, Paul Vincent, Carter-Vincent, Inc. Boston.

Kelly Named Associate



Joseph M. Kelly, Jr., 33, of Stoneham, Mass., has been appointed an Associate of the firm of George L. Garfinkle Associates, Architects, Boston.

A Registered Bay State Architect, Kelly has been in the profession for 13 years and with Garfinkle Associates since 1964. He graduated from Wentworth Institute and received his Certificate of Graduation from the Boston Architectural Center in 1965.

Hume Named

Thomas Hume, AIA, a principal in the firm of Norton And Hume Corporation has been elected President of the Board of Trustees of the Ferguson Library in Stamford, one of the outstanding public libraries in the State of Connecticut.

A native of Stamford, Mr. Hume received his undergraduate and Master's degree in architecture from Yale University. He is a Director and Secretary-Treasurer of Architects Corporation whose commissions in Stamford include the 200-bed extended care facility at St. Joseph's Hospital, the corporate headquarters and manufacturing plant for Branson Instruments and the Watrouse Library at the King School.

Mr. Hume is a member of the Board and past President of Family and Children's Services, Stamford; on the Advisory Committees of YMCA and Junior League; former Board member Committee on Training and Employment, Stamford O.E.O. CAP Agency, United Fund and Community Council.

Design in Steel Award Program

Entry forms are now available for the 1970-71 Design In Steel Award Program, sponsored by American Iron and Steel Institute. Along with each entry form is an eight-page brochure explaining rules and procedures for the Program.

People who help create products, structures or art from steel are eligible to win one or more of the 28 top awards. The awards cover best design in steel and best engineering in steel in 13 different categories, plus two awards for best art. Submissions are limited to structures completed after January 1, 1968, or components initially offered for sale after January 1, 1968.

Entry forms, which must be postmarked no later than January 29, 1971, are available from:
Design In Steel Award Program
201 East 42 Street
New York, New York 10017

Product categories are: agricul-

(Continued on Next Page)

(Continued from page 27)

tural equipment; appliances, housewares and household equipment; business equipment; educational equipment; environmental enhancement and control equipment; furniture and furnishings; industrial equipment; medical and scientific equipment; and transportation.

Structure categories are: high-rise construction, housing, low-rise construction and public works construction.

Art is a separate category.

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