ARCHITECTURAL RECORD

MID-MAY 1963 ISSUE • BUILDING TYPES STUDY:

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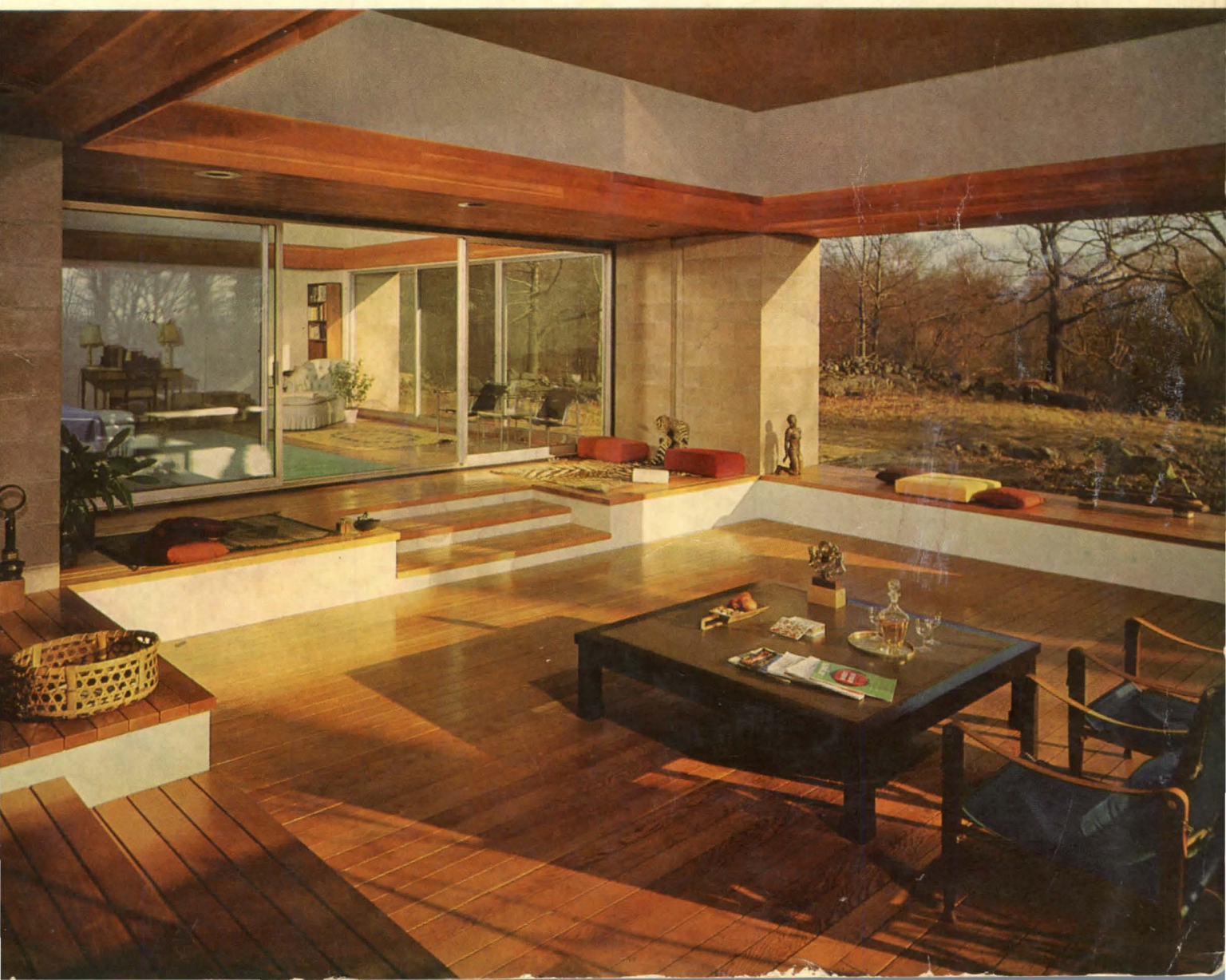

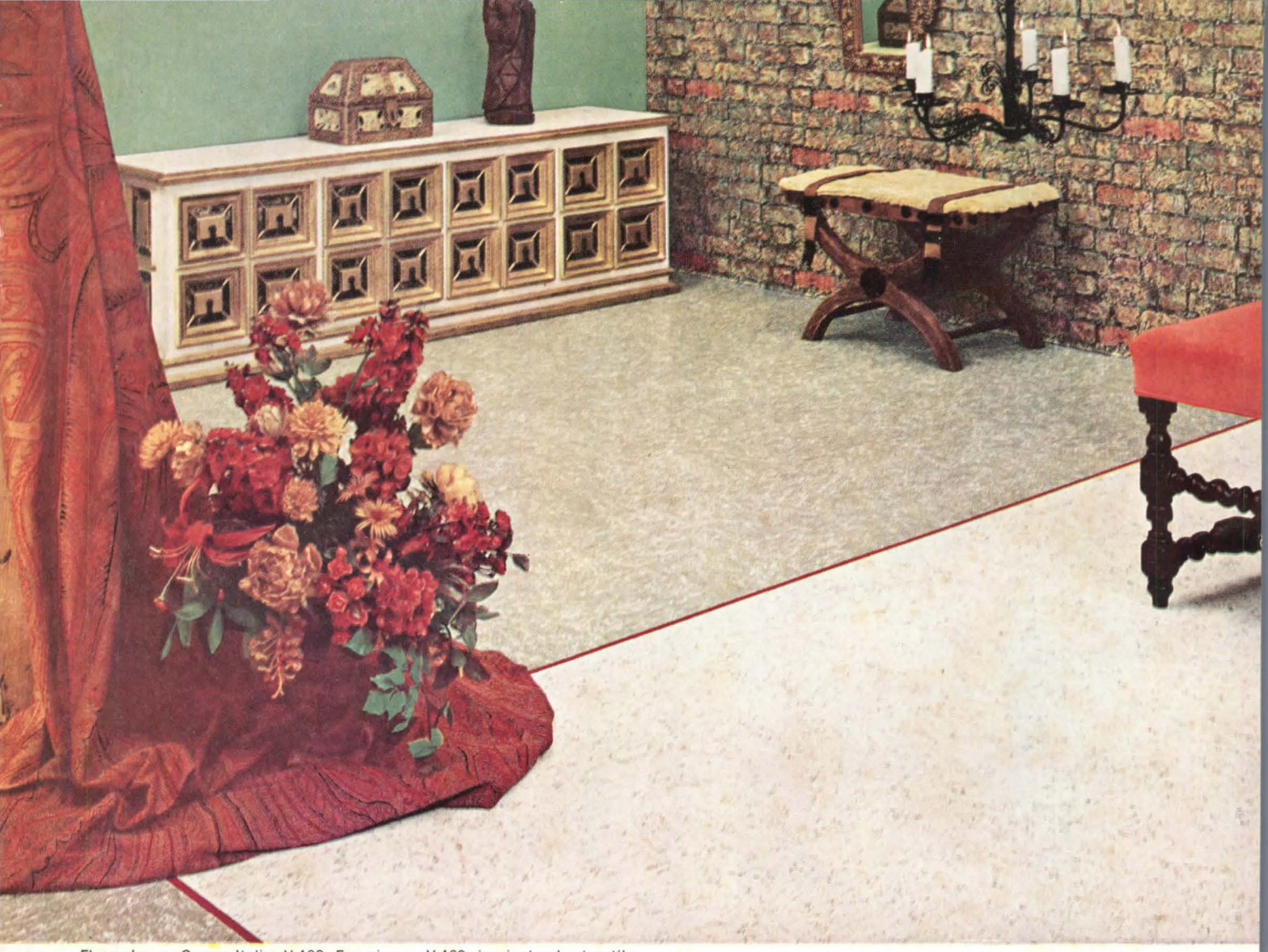

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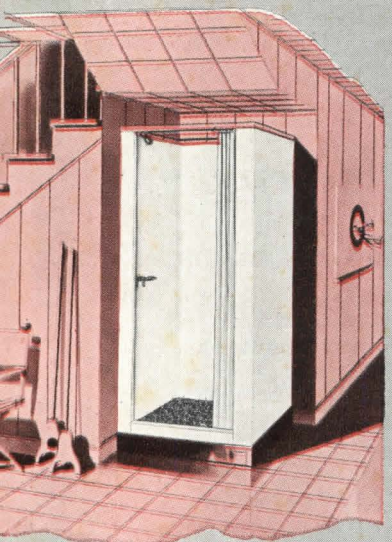

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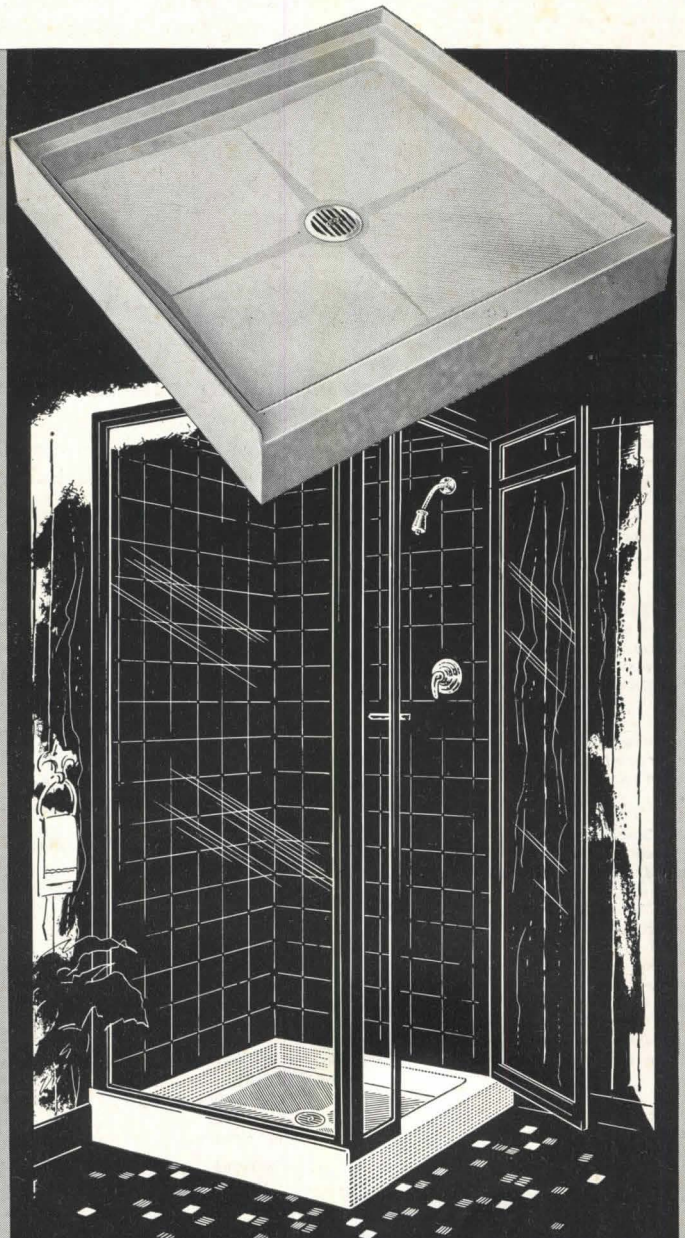

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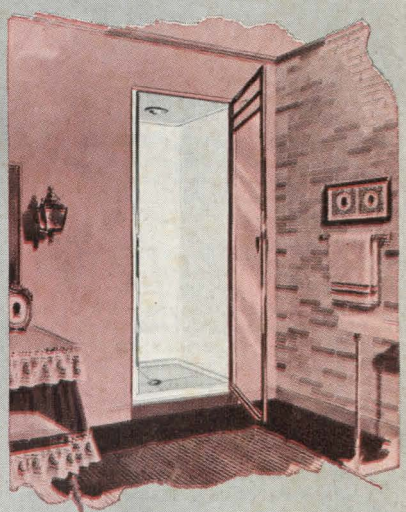

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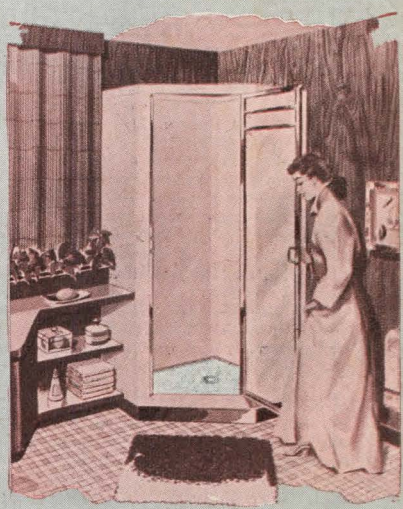

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House for Mrs. Virginia Hubbard, Greenwich, Connecticut. Ulrich Franzen, architect. © Ezra Stoller, photographer

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Note to Builders:

ARCHITECTURAL RECORD takes pleasure in bringing you this Mid-May issue with the hope that the award-winning houses presented here (five of which are development houses) may help stimulate even closer architect-builder cooperation for even better design, and for the benefit of all.

Features

RECORD

CONTENTS
Mid-May 1963

Building Types Study 320: Record Houses® of 1963

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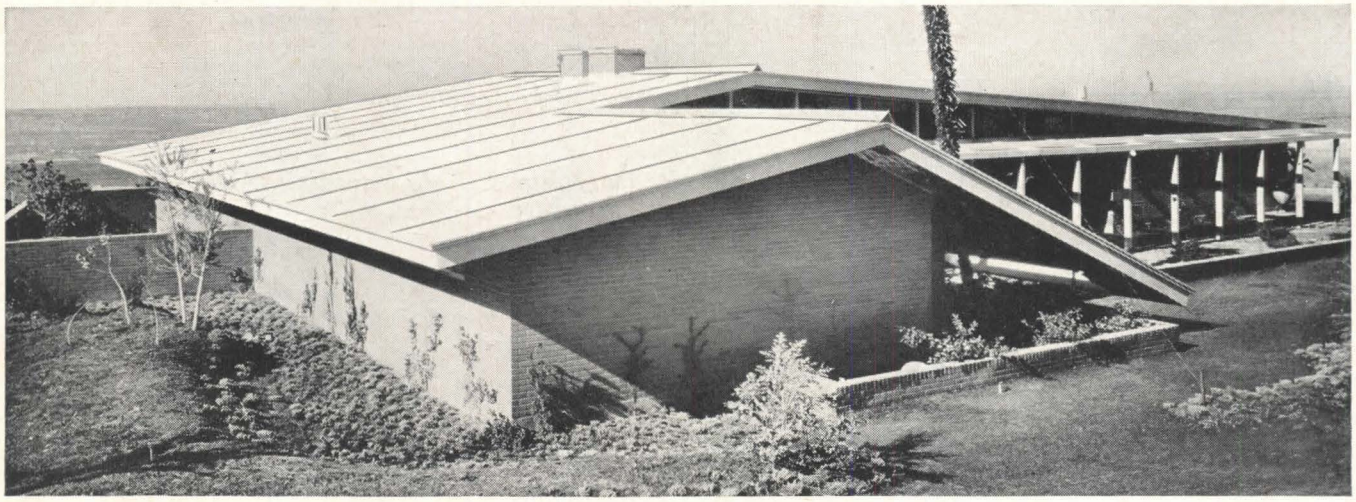

Beautiful Roofing and Beautiful Dreamers

It used to be that the roof of a house was a very unimaginative thing—installed mainly to afford protection against the elements. It was given little consideration in the overall aesthetic expression of the house.

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CLIMATE-BALANCED HOUSE DESIGN

Natural resources can increase efficiency and lower costs of heating and cooling systems

by Victor Olgyay, Research Associate Professor, Princeton University

The house structure which in a given climatic environment setting reduces undesirable effects of heat, cold and humidity, and at the same time utilizes all natural resources favorable to human comfort, may be called "climate balanced." Perfect balance can scarcely be achieved except under exceptional circumstances. But it is possible to achieve a house of great comfort at lowered cost through proper arrangement of windows and shading; insulation; openings for breezes; utilization of trees and planting. We will do well to study the broad climate layout, then apply the findings, through a specific region, to a specific structure. The evaluation method to be outlined here is applicable to any climatic situation. And as it indicates the needs of the climatic variables throughout the year, it supplies a convenient index for architectural applications.

Shelter and Environment

Man strives for the point at which minimum expenditure of energy is needed to adjust himself to his thermal environment. Conditions under which he succeeds in doing so can be defined as the "comfort zone," where most of his energy is freed for productivity.

The Climatic Comfort Zone

As the temperature rises, we can counteract it (within certain limits) with increased air movement, with lowered radiant temperature (reduced solar effect), and with increased evaporation. A low temperature can be balanced by reduced air movement or by high radiant temperature (increased solar effect). On this basis, we can construct a chart (Figure 1). The comfort zone is in the middle.

We naturally cannot expect to solve uncomfortable conditions by natural means only. As we shall see, the environmental elements aiding us have their limits. Over those boundaries we should apply cooling or heating by mechanical equipment. But the architect should build the shelter in such a way as to bring out the best of the natural possibilities.

Explanation of the Chart

In the middle we can see the summer comfort zone (dotted area) based on the desirable and practicable ranges, which assumes a person to be exposed to outdoor conditions of air temperature, solar radiation and wind.

At higher temperatures, the wind effects can bring back the feeling of comfort. The wind effect counteracts the high temperatures. At humidities over 60 per cent relative humidity, the vapor pressure is counteracted by the winds.

At low humidities, the effects of winds are of little help. We can gain only around 8 degrees reduction in feeling at comparatively strong air movements. Here evaporative cooling is the tool with which to fight high temperatures. At high temperatures, the top curves indicate the limit of work of moderate intensity and show the unbearable condition.

At the lower perimeter of the comfort zone is the line from which shading is needed towards higher temperatures; and conversely, solar radiation is necessary to counteract the cold feeling towards lower dry-bulb temperatures.

Climatic Evaluation By Region

A bioclimatic chart (Figure 2, page 9) can be developed which maps the problems and describes the coun-

continued on page 9

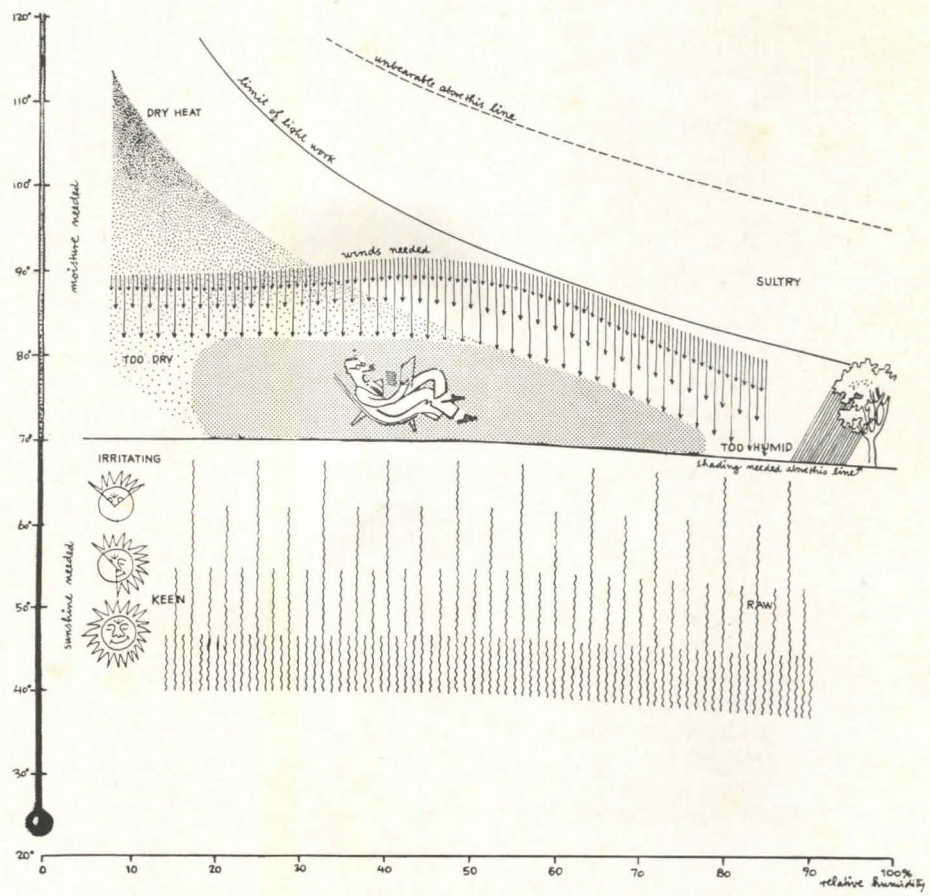

Figure 1: Schematic bioclimatic chart indicating comfort zone (dotted area)

This article is based on research developed at Princeton University's School of Architecture and recently published in the book "Design with Climate" (Princeton University Press)

COMPLETE SEWAGE TREATMENT *for* 50 HOMES

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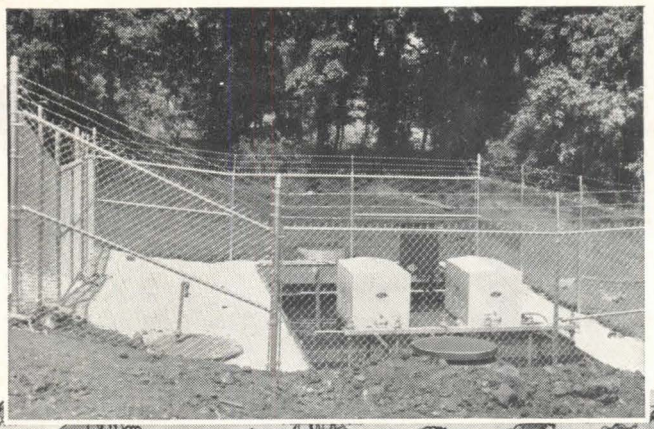

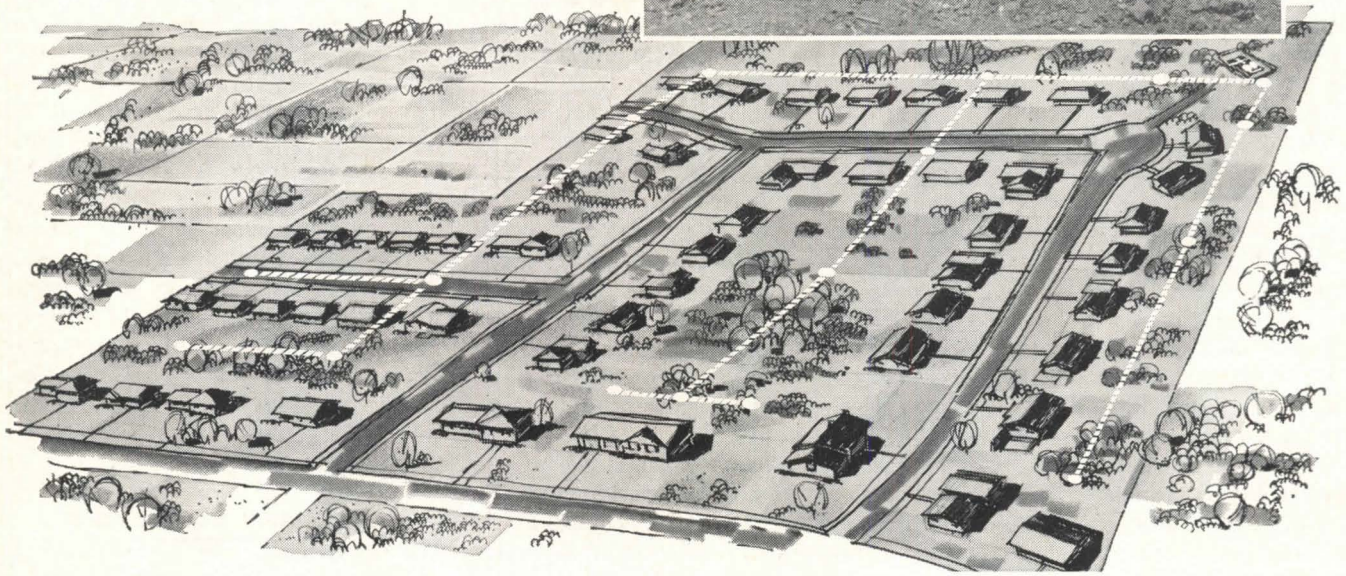

COST STUDY: The actual experience of Developer Paul B. Bascom, Merriam, Kansas, at South Wornall Gardens in suburban Kansas City, Mo.

S&L Bascom Development Company turned a proposed 36-home "septic tank community" into a 50-home subdivision with its own sewerage system and treatment facility at a cost of $700 per home—only $250 per home more than the cost of installing septic tanks.

The development of South Wornall Gardens began in 1959. The original survey called for 36 lots, averaging 100′ x 150′ to meet local requirements of 15,000 square feet per lot for homes on septic tanks. Only eight homes were built before initial home owners were plagued by septic tank problems. Lending agencies withdrew financial support until the problems were corrected.

The solution was to redesign the subdivision for a complete sewerage system including a Smith & Loveless factory-built "Oxigest" sewage treatment plant.

The 17,000 gallon-per-day "Oxigest" plant including accessory equipment cost approximately $250 per home, delivered to the job site, ready to install. The cost of installing the plant, laying 3000 feet of lateral sewer lines with 15 manholes and five small lateral manholes, 180 feet of effluent piping from the treatment plant to a nearby stream, a by-pass line around the treatment plant, grading, drainage, wiring to the plant, a 10-foot wide crushed-rock roadway to the plant, fencing, landscaping and a water line to the plant was $450 per home.

Under this plan the lot sizes could be reduced, averaging 75′ x 140′. The subdivision was re-platted for 52 lots . . . an increase of 16 lots. Two of the lots were reserved for the sewage treatment plant, so the total increase was 14 additional home sites.

The original lot price of $2,050 was maintained and a $200 service charge for connecting to the sewerage system was added. On the 14 additional lots alone, the value of the salable land in the subdivision was increased by $31,500. The sewer connection charge on the balance of the lots brought the total increase to $38,700, which was more than adequate to cover the cost of the entire sewerage system and treatment plant.

The redesign had a definite impact on the market potential for the development. Home owners were pleased to get the problem "out of their backyards" and activity by prospective buyers was renewed within a week after the treatment facility was installed.

For a detailed cost study on South Wornall Gardens and information on Smith & Loveless "Oxigest" sewage treatment plants, write Dept. 150.

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continued from page 7

measures for human comfort in certain climatic region. To evaluate the climatic situation of a given ale, a detailed analysis covering the nplete yearly cycle is necessary. cal weather data supplied by meorological stations may give the chitect information that will enable n to construct his own evaluation. The regional evaluation of a climatic situation can be done by plotg combined temperature and relae humidity data on the chart at gular intervals to show the general aracteristics of a region.

On a regional chart such as Fige 2, the climate situation of a typiaverage day of each month is otted. From this the bioclimatic alysis can be translated to a yearly art (Figure 3).

When the bioclimatic analysis is nsferred to a yearly chart, the eds are put into a timetable, where e varying climatic elements of any y in the year can be read vertically. th such "diagnosis of the region," e relative importance of the varis needs, assuming a person to be posed to outdoor conditions—such radiation (indicated in full lines to 300 Btu/hr intensities), shadg (dotted area, overheated period), wind effects (vertical lines), and on—can be evaluated.

gional Evaluation for Phoenix

Figures 2 and 3 show how bioclitic effects are evaluated for Phoe, Arizona. The daily temperature rves in Figure 2 have a marked gh slope indicating a large daily nge of heat. Since the yearly temrature distribution lies in a relaely short range (Figure 2), and e winter daily maximums and sumr minimums approach the comfort ne, it is highly desirable to main- n those conditions. But the evaltion chart (Figure 2) indicates rupt changes: there are days (such the 1st of May) when the temperae soars from underheated levels to such extremes that even high movements cannot restore comrt. In Figure 3 note that within the nd area full lines indicate periods ere over 300 fpm air velocities uld be needed. Since too high veities would be annoying, other nedies should be applied, such as aporative or mechanical cooling led by the heat lag of materials. ring daytime hours the average

continued on page 11

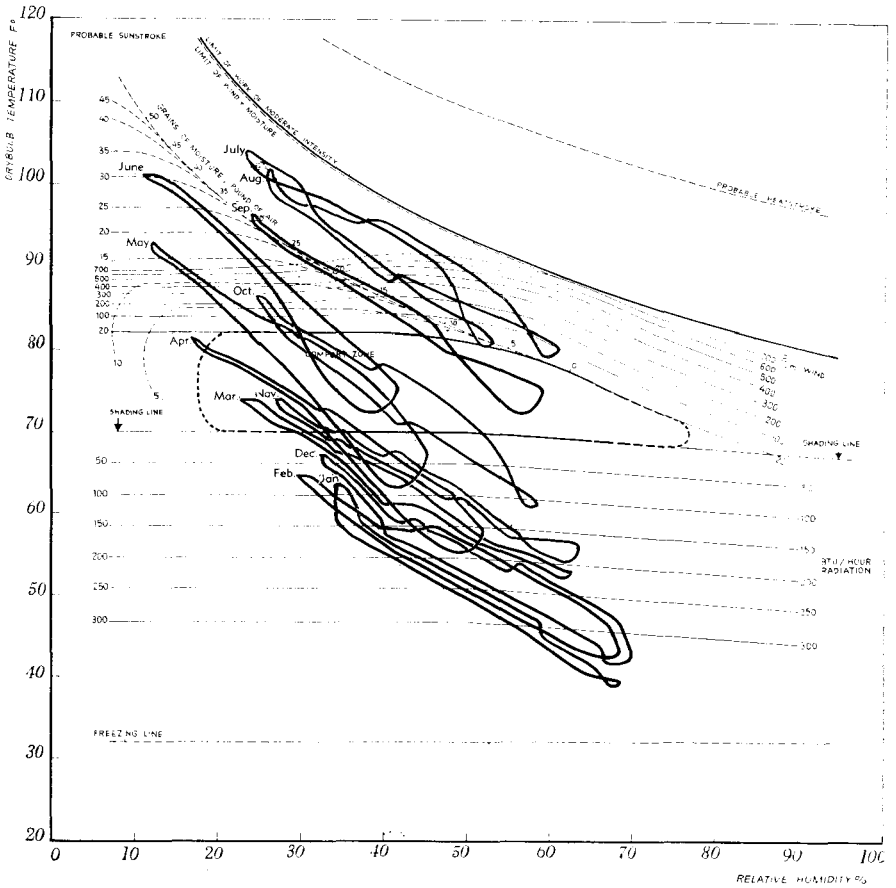

Figure 2: Climate data for a typical day of each month in Phoenix, Arizona

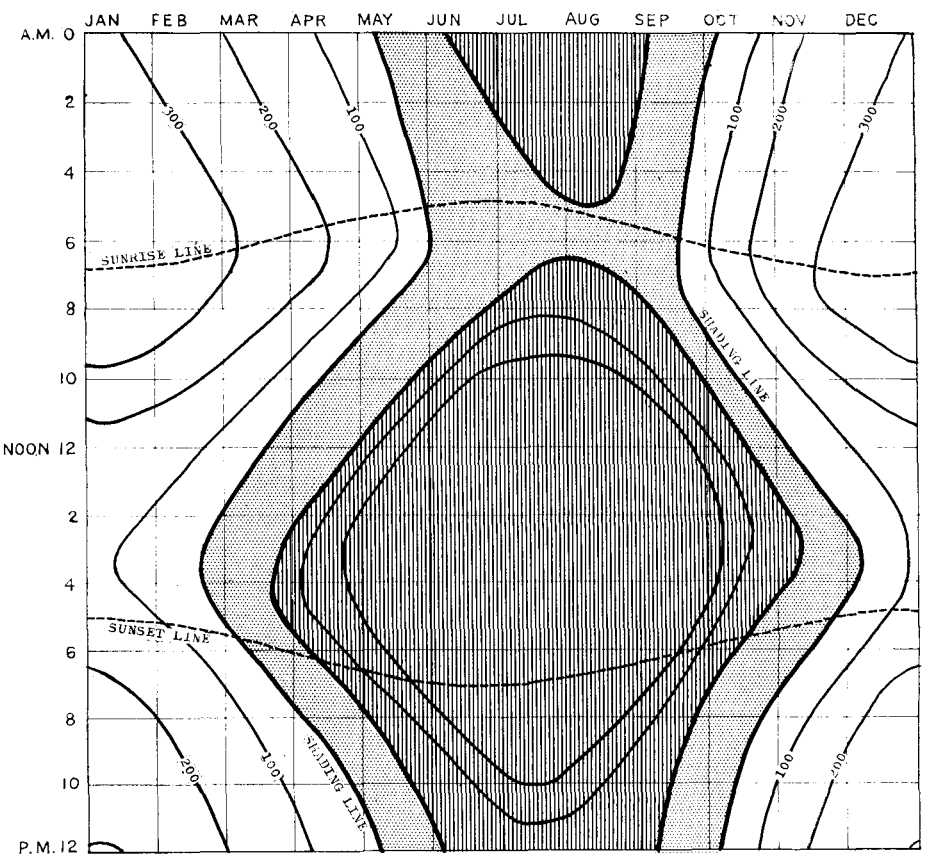

Figure 3: Yearly timetable of climatic needs for Phoenix, Arizona

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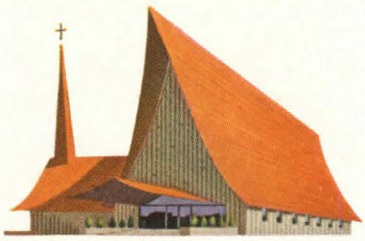

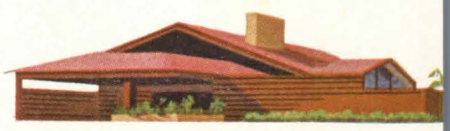

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FROM THE MILLS OF THE SOUTHERN PINE ASSOCIATION

continued from page 9

early needs are: 37 per cent sun eat, 63 per cent shade, 37 per cent ind protection, 19 per cent breeze eriod, 28 per cent other additional ooling methods; 16 per cent of the me shade will provide comfort. rom the specific climate needs the llowing architectural principles can e evaluated or interpreted:

In *orientation* the sun's heat is ecisive both positively (in cold per-ds) and negatively (in hot periods). balance can be found between the nderheated period," when we seek adiation, and the "overheated per-d," when we want to avoid it.

Shading calculations are based on ie maxim that throughout the year underheated times the sun should rike the building, and in overheated mes the structure should be in ade. A chart of the sun's path, plus eometric and radiation calculations, n describe the effectiveness of shad-g devices.

Housing forms and building apes should conform to favorable adverse impacts of the thermal nvironment; accordingly certain apes are preferable to others.

Air movements can be divided into ie categories of winds and breezes, cording to their desirability. Winds curring at underheated periods ould be intercepted, cooling breezes ould be utilized in overheated per-ds. Calculations based on rate of r-flow through a building in com-nation with inside flow patterns ay be used to determine location, rrangement and sizes of openings.

Indoor temperature balance can be hieved to a certain degree with reful use of materials. Both time g and insulation characteristics of aterials can be utilized for im-oved indoor conditions. The criteria r balance are: minimum heat-flow t of building in wintertime; mini-um heat-gain in the structure dur-g the overheated period.

paque Materials and idoor Temperature Balance

The sinusoidal fluctuating daily mperature loads as they percolate rough the structural elements be-me distorted in amplitude and are layed in time. Both these functions the material can be utilized favor-ly to approach balanced conditions the interior of a structure. This chnique is demonstrated for a par-cular case that follows.

The "shift in phase" effect provides the leeway to delay outside impacts from heat load periods to a cooler time phase, and to transmit the nighttime low temperatures to the daytime heat peak. Generally it can be said that in zones of high daily variation, an approximate half-day time-lag shift (that is, the delay of night coolness to the day and the day warmth to the nighttime) will result in thermal balance. However, as the sun's impact heats the various surfaces at different hours, the problem has to be studied in detail.

Such an analysis is applied for Phoenix, Arizona summer conditions (July 21, at clear day, average temperature conditions). The sol-air temperature impacts on the differently oriented surfaces are indicated in Figure 4. Here the accumulated heat load concentrating at the early afternoon hours is evident. In order to shift the impacts to cooler periods different exposures required different time lags. The heaviest load falls on the horizontal surface (roof), needing a shift of 11 to 12 hours. The load on the east exposure would need from a minimum 12 to an optimum 17 hour shift to avoid delivering its heat during peak hours, which indeed would be an extreme requirement. Therefore, the practical solution is to have no lag at all for the east, and to let the impact be felt at the inside while the daytime temperatures are still low. For the south side, the desirable shift is minimum 7 hours, optimum 10 hours. The west side which receives the heaviest load among the wall surfaces should have a minimum lag of 5, an optimum shift of 10 hours. The north wall has the least importance with regard to lag characteristics, however a 5 to 10 hours' delay helps somewhat in the daily heat distribution. The sol-air effect distribution delayed by optimum time lag requirements is shown in Figure 5.

A summary of the desirable time lag characteristics is illustrated in Figure 6 for Phoenix, Arizona. A schematic building is placed in center. The radial lines refer to the hours. The advantageous lag characteristics for the main orientations are indicated with arrows.

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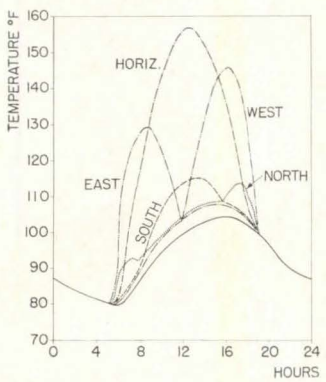


Figure 4: Sol-air impacts on surfaces of house in Phoenix

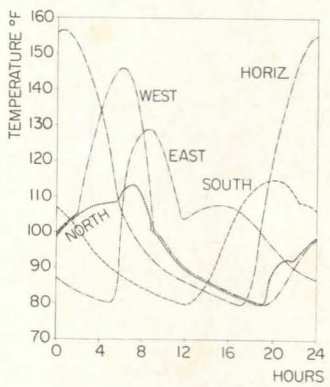


Figure 5: Desirable shift in sol-air impacts in Phoenix

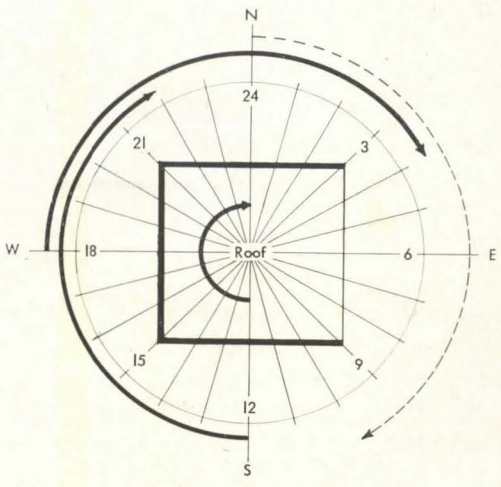
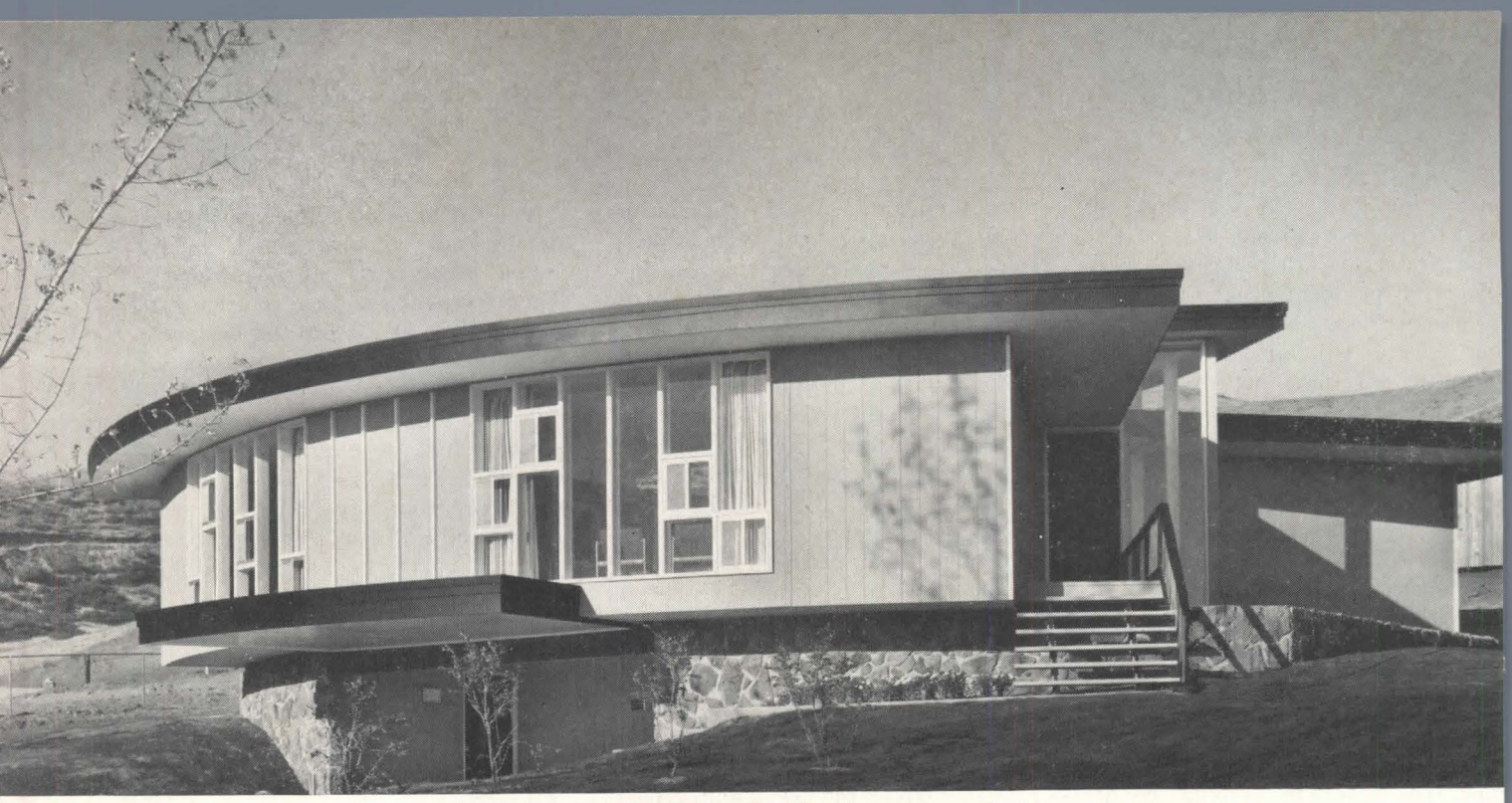
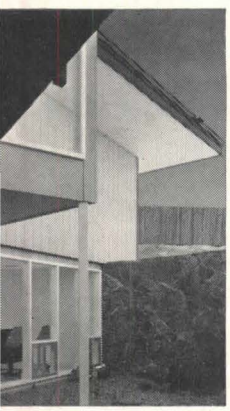


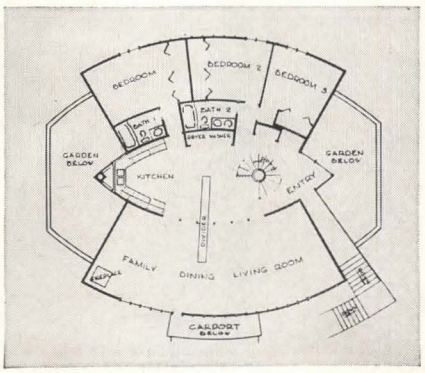
Figure 6: Desirable time lag characteristics of differently oriented surfaces

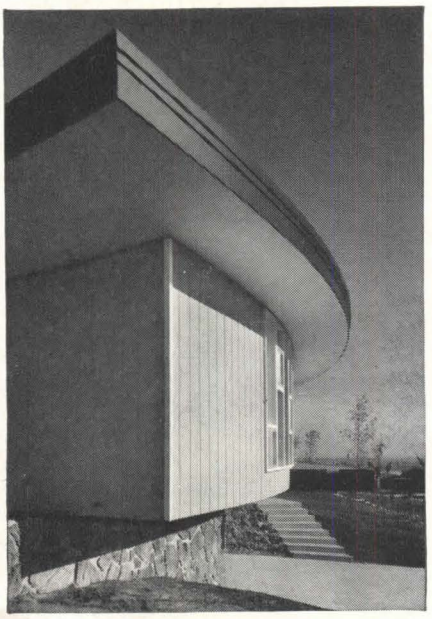


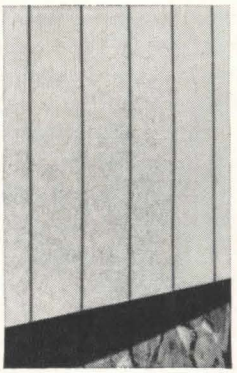
Butterfly House, Architect Lory Ice, Tri-L Const. Co., Green Mountain Development, west of Denver, Colorado

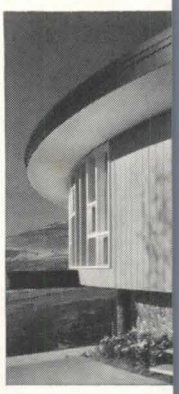
For significant new homes











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Armstrong SIDING

continued from page 11

In Phoenix the large daily temperature variation generally calls for heavy walls, with relatively little importance on the north, and with no ag requirements on the east. The delay effect of the roof in the hot-arid region is, however, a task difficult to ulfill, although extremely important.

The calculation method for balnced insulation effect is illustrated or Phoenix, Arizona in Figure 7. In ne middle of the graph is the plan of structure; at each side the hours of ne day are indicated. The winter and ummer sol-air temperatures are harted on unfolded elevations. The emperature curves, computed for unny days at average conditions for ght surfaces, are related to winter dotted sections) and summer (vercally-lined) comfort conditions. The ection of the structure is shown at ne bottom to indicate roof impacts.

To illustrate difference in heat loads or an "orthodox house," and one ontrolled for climate balance, the orthodox house" was assumed to be ne of 1,225 square feet, insulated ood frame construction, with approximately 20 per cent window area istributed equally relative to the oor surface.

For the "balanced house" evaluaons the same net proportions in all, floor area, and glass surfaces ere used.

The climate balanced house was chieved by orientation, overhangs nd shading, masonry walls, ventiated roof construction, weather stripping, and ventilating appliances.

In summer the east wall brings 5 er cent, south 5 per cent, west 6 per ent and north 6 per cent heat gain. Vindow areas on the east account for 5 per cent, south 22 per cent, west 4 er cent, north 4 per cent of the total ncoming heat. Heat gain through ne roof amounts to 13 per cent, nrough infiltration 12 per cent, nrough doors 1 per cent, heat cre-ted indoors 7 per cent.

The daily heat behavior of the balnced structures in Phoenix can be educed from the photos. The arangement of openings (east 80, south 20, west 20, and north 20 square eet area) takes care of sol-air temerature effects. The gardens lower emperature loads (here conservaively taken as −5 F at peak vales). A carport shades the west wall. he summer peak load of the orthoox house (40,513 Btu) is reduced o 17.794 Btu.

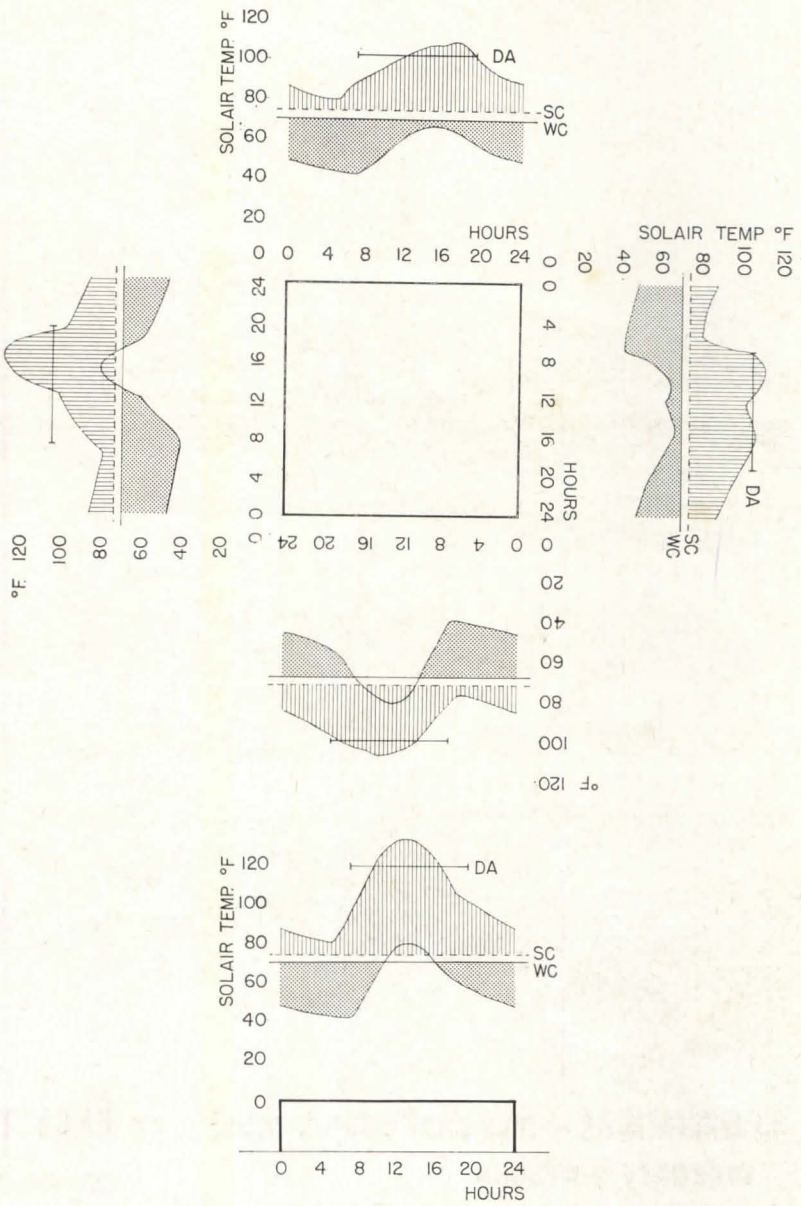

Figure 7: Sol-air impacts on various surfaces for summer (vertical-lined areas) and winter (dotted area)

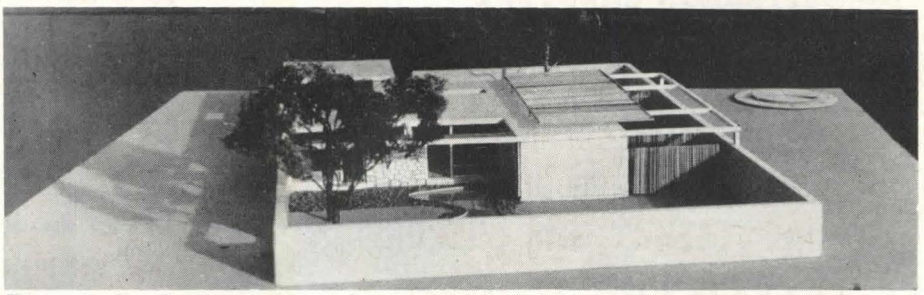

Figure 8: South view of climate-balanced house in Phoenix

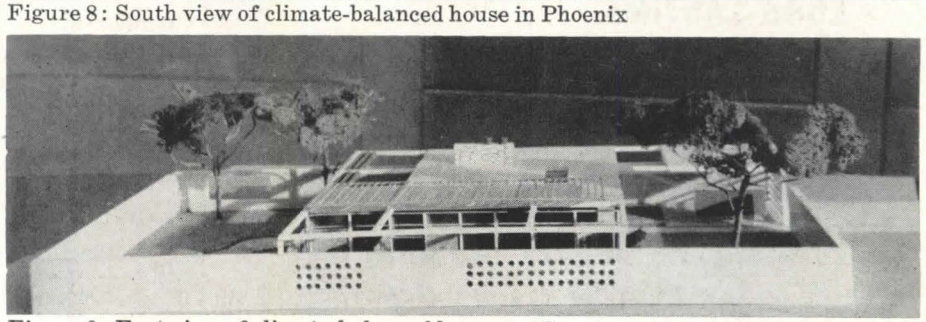

Figure 9: East view of climate-balanced house in Phoenix


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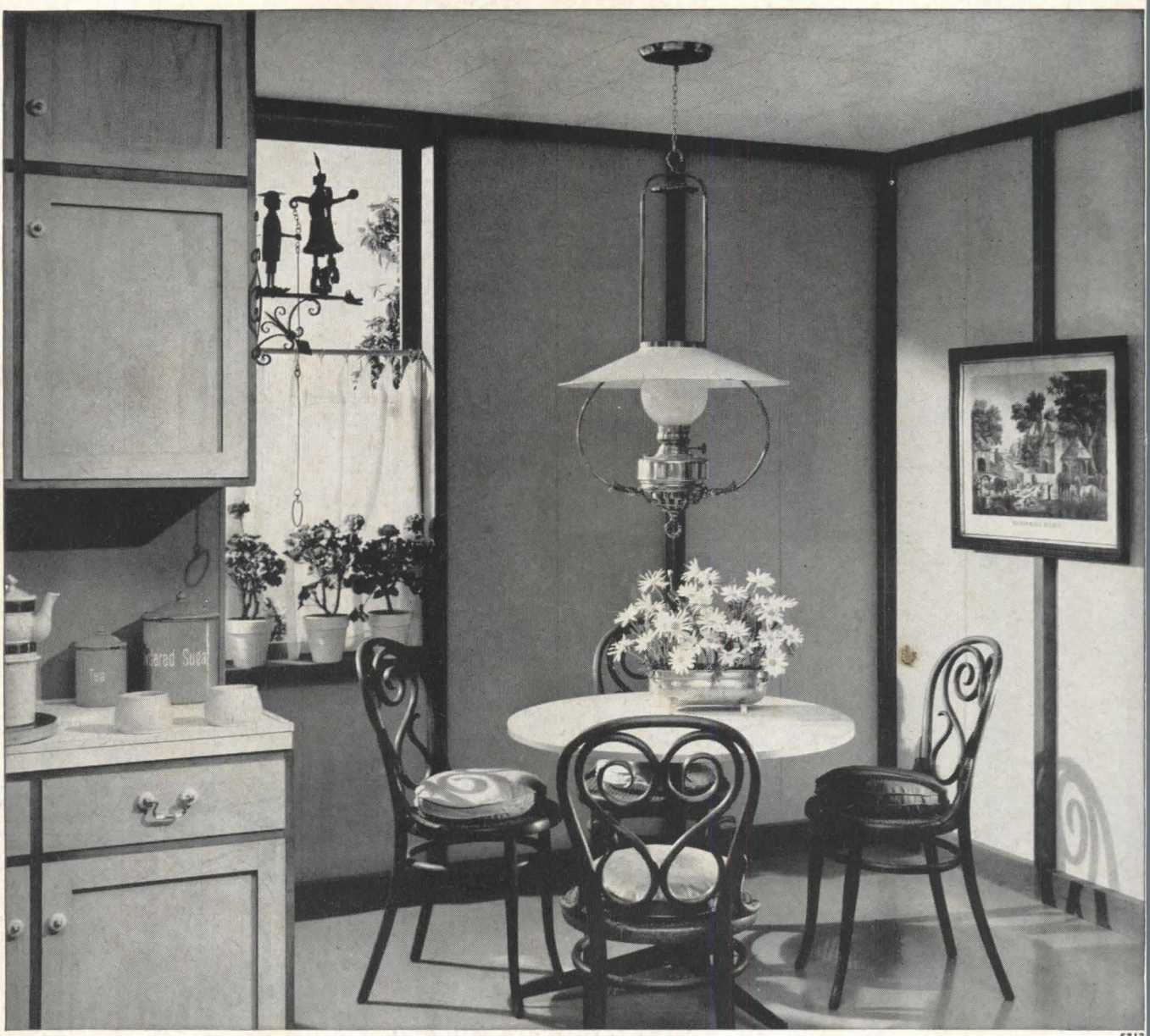

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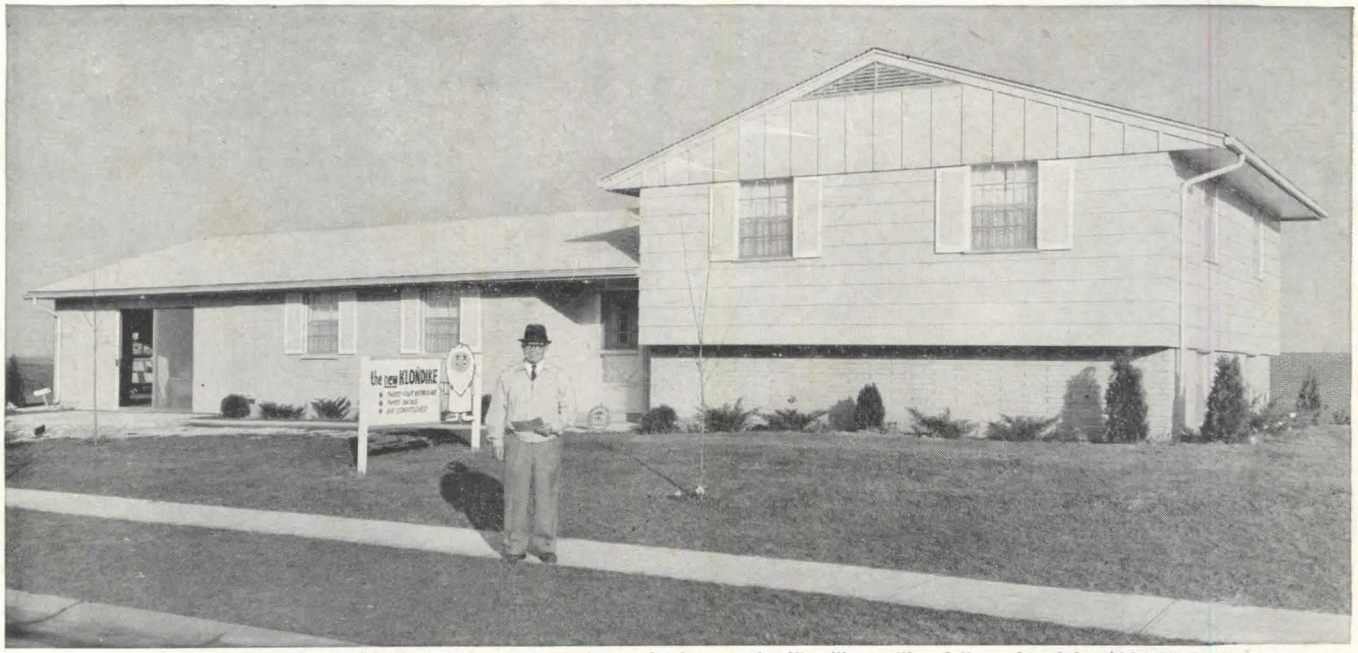
"Janitrol delivers the quality comfort and dependable local service we require for our Northmoor families"

Leonard J. Schear, Developer and Builder Northmoor Club Estates Dayton, Ohio



Leonard J. Schear is shown here with one of his most popular model homes, the Klondike, selling fully-equipped for $22,500. Janitrol central air conditioning and $1800 worth of built-in appliances are included. Five other models are offered, starting at $17,300.

Northmoor Club Estates covers 500 acres of rolling land in suburban Dayton and includes a 160-acre golf course. It's a unique community that combines homes of superior quality and country club living for year 'round family fun. This combination has been a most successful one for builder Leonard J. Schear, who has received national recognition for his Northmoor development.

Mr. Schear says, "every product and subcontractor is selected to contribute to the quality of our homes. We are real happy the way Janitrol heating and air conditioning has helped us deliver a home with a high standard of comfort that's economical to operate and maintain. Many of our buyers are second and third-time home owners who appreciate this extra hidden comfort value and they are particularly impressed with the unusual quietness of the Janitrol equipment."

"With the new owners moving in every day of the week, our production schedule is quite critical. But, even with last minute changes, our Janitrol contractor, the Rigby Furnace Company, has always made sure that every new Northmoor family moves into a warm home, on schedule."

It's dependable local service like this, plus Janitrol product performance that keep the cost of comfort down . . . eliminate the expense of call-backs that also aggravate your customers. The versatile Janitrol line includes models for heating and cooling to meet all your needs from small homes and apartments to commercial buildings. Mail the coupon today for complete information on how you can effectively merchandise the extra value built into your homes with quality Janitrol heating and air conditioning.

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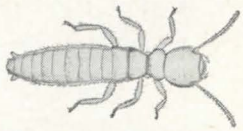
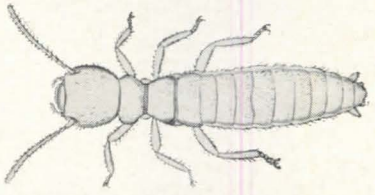


subterranean TERMITES!



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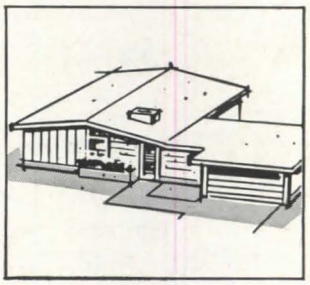
Subterranean termite damage is on the upswing. It topped $200,000,000 last year, in the United States. And subterranean termites really thrive in Hawaii, because the temperature and humidity are ideal for their development. Most building styles today are vulnerable to termite attack, and more and more are being built in previously undeveloped areas . . . the natural environment of termites. Do your buildings really need termite protection? Can the owners really afford to be without it?



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For details, call your professional Pest Control Operator or mail coupon now!

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Steel's Symbol of strength, long life, and economy.

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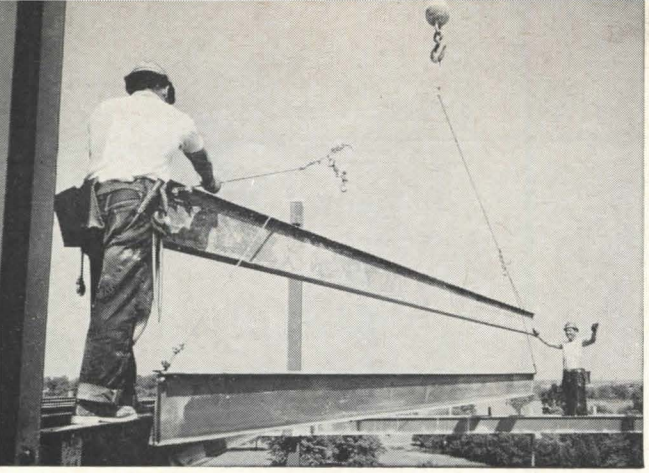
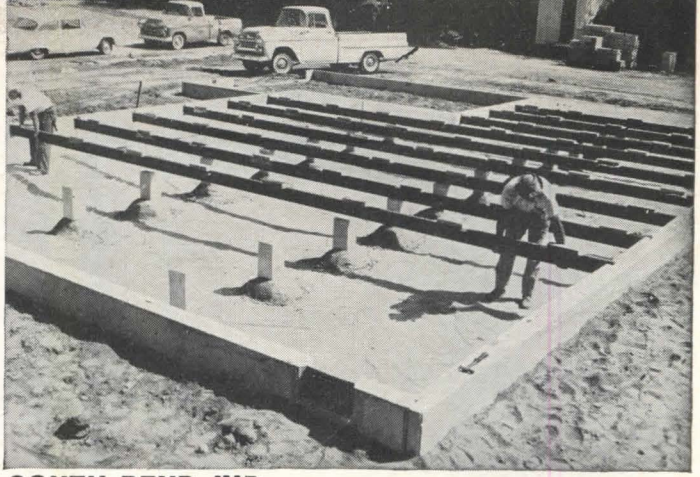


ALTIMORE, MD.



SOUTH BEND, IND.

THE JOB... SPECIFY J&L LIGHTWEIGHT STEEL STRUCTURALS

NEW ORLEANS, LOUISIANA

In-place cost of structural framing for Studio Arms IV, a luxury apartment in a New Orleans suburb, was 30% less than with conventional methods. The novel design called for Double Warren trusses fabricated with standard channels as top and bottom chords, and standard angles as diagonals. Junior Beam joists, spanning 24 feet, rest in the vertices of triangles formed by truss diagonals. Results: Lightness and ease of construction, less steel weight per square foot, saving of one foot of height per floor. Builder, Dominion Construction Corp., New Orleans; Design and Fabrication by Milan Engineering Co., New Orleans.

NEW YORK, NEW YORK

The architects wanted an unbroken stairway of 200 flights for the Time & Life Building in New York . . . the answer was lightweight Junior Channels for straight stringer sections, joined at the landings by 3/16-inch sheet that had been bent into a spiral on a brake press. To make the spirals look like part of the straight stringer sections, "dummy" flanges were cut from 12-inch Junior Channels that had been heated and shaped to match the spiral, and were welded in place. "This job could not have worked out so easily without the flexibility we derived from 12-inch Channels," says Mr. Robert Sexauer, Treasurer, Sexauer & Lemke, Inc., architectural metals firm that fabricated the stairs.

BALTIMORE, MARYLAND

In the 9-story 11 Slade Apartments, a Mullan Contracting Company project in Baltimore, secondary floor members (12″ Junior Beams and 14″ Light Beams) were embedded in reinforced concrete girders. These were formed with removable Junior Channels spanning between columns and supporting secondary beams. Cast iron "K-Clips" were then hooked over the top flanges of the Junior Beams, and plywood forms placed on the protruding ends of the clips. After curing of the concrete girders and the floor, K-Clip ends were knocked off, allowing the plywood forms to drop. Construction efficiency and reuse of forms saved considerable money and time—four days to complete a floor instead of the usual six. Architect, Joseph Foutz; Structural Engineer, Edward S. Klausner; Associate Engineer, Wallace & Gutberlet.

SOUTH BEND, INDIANA

Two men can easily install lightweight 6-inch Junior Beams, delivered cut to length, in brackets suspended on prestressed concrete foundation walls. Crawl space is designed as a plenum chamber with a plastic sheet, laid on the ground as a vapor barrier. Ductless heating is provided through registers in the sub-floor and finish flooring. Besides reducing detail work on the site, this method devised by Place & Company of South Bend saves an estimated 15 cents per square foot in construction of their 3-bedroom ranch homes.

ATLANTA, GEORGIA

"The 14-inch Light Beams proved to be most economical for the spans and loads involved," say the designers of Atlanta's modern air terminal. Light Beams are used extensively in the six protruding 2-story concourse sections that efficiently cope with heavy traffic peaks. Formed metal decking, serving as support for insulation and built-up roofing material, is welded to Light Beam purlins which also help support a maze of concealed piping. Further economy was gained by using Junior Channels as stair stringers. Designers were Robert and Company Associates, an Atlanta architectural and engineering firm.

Easily adapted to a wide variety of architectural designs, Lightweight Structurals help to reduce steel tonnage. They're easy to fabricate, raise and position, and this reduces labor costs. For more facts about lightweight structurals, call or write direct.

Jones & Laughlin Steel Corporation
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1: Bargain Hunter

She wants a lot for a little, bless her heart. She's one of our favorite customers. "Cheap" and "just as good" disposers don't interest her. In terms of service and expensive repairs, she suspects they'd be over-priced at one-third the manufacturer's list. So she selects the In-Sink-Erator Saturn—a *real* bargain. This rugged beauty has wonderfully long life . . . amazingly speedy action . . . well-bred quietness . . . and gives her more per dollar than she dreamed possible!

2: Quality Sleuth

A real persnickety customer, this one! She knows the innards and performance of practically every disposer. But she's hopelessly in love with the handsome Saturn. Reason: Saturn's wealth of exclusive features: exclusive, patented Automatic Reversing Action that *doubles* shredder life and prevents jams · Exclusive Detergent Shield that guards against corrosion · Exclusive Polystyrene Sound Barrier for kitten-quietness. Only In-Sink-Erator has them all—and Mrs. Quality Sleuth knows it!

3: Name Dropper

A bit snooty, but likeable. Likes to surround herself with celebrities, famous names, and prestigious household goods. So naturally, she cottons to In-Sink-Erator—first name in garbage disposers.

She adores the Saturn's striking beauty and fine design. They say nice things about her own taste and judgment. Her magazines-McCall's . . . House Beautiful . . . Better Homes and Gardens . . . Vogue, plus Queen for a Day on network TV-confirm In-Sink-Erator's upper status.

Saturn **707**

Offers greater reliability . . . more features . . . better warranty . . . and bigger value than any other comparable disposer. Installs quickly and easily.

NOTE: 8 Models to choose from! There's a top-quality In-Sink-Erator priced exactly right for any home you design. You can depend on it to eliminate complaints and costly call backs. And it helps build the reputation you're so proud to have!

25th ANNIVERSARY

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Now...Prefinished Asbestos-Cement Panels guaranteed for 10 years

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Gold Bond materials and methods make the difference in modern building.

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LANNING FOR QUIETER, SOUND-CONDITIONED" HOMES

ɔustical consultants discuss today's available means and techniques for noise reduction

Lewis S. Goodfriend and R. L. Cardinell

n unfortunate by-product of our lized way of life is an ever-in-ısing production of noise. A city ller, attempting to escape the din ːity noises, buys a home in the ırbs and is often doomed to dis-ointment. He merely exchanges set of annoying sounds for an-ːr. Certain sounds indigenous to ı locales may be unnoticed in the , but a great nuisance in the sub-s where total quiet is often ex-ted. They stand out to greater ːnt there than they do in the city, ːre the level of general back-und noise is considerably higher. Iodern home construction has vided us with many things of ːit—efficiency, convenience, com-ː—and architects and builders e striven to keep costs down in face of spiraling inflation. How-r, one factor has either been gen-lly overlooked or given only min-ım attention, and that is freedom m annoying sounds. This is rather prising in view of a growing pub-consciousness of noise and well licized efforts at noise abatement ch have been taking place over past few years.

f a man's home is his castle, it uld be a fortress against annoy-es of all kinds, disturbing sounds uded. Indeed, the drafty, cold, ıstrous castles of old were no bt considerably less noisy than ay's average home simply because dern noises did not exist. By their y size and structure these edifices llowed up or blocked the trans-sion of those sounds that were de. Floors were covered with rush-sometimes to a depth of 2 feet, walls were covered with tapes-s and hangings to block the cold. h also contributed sound absorp-ı. Dungeons were located far ugh away so that prisoners' eams could not be heard. Kitchens e not equipped with dishwashers, mechanical garbage disposers or food mixers. Music was provided by a minstrel not a 50 watt amplifier. There were no trains, planes, trucks or motorcycles to create intrusive noises.

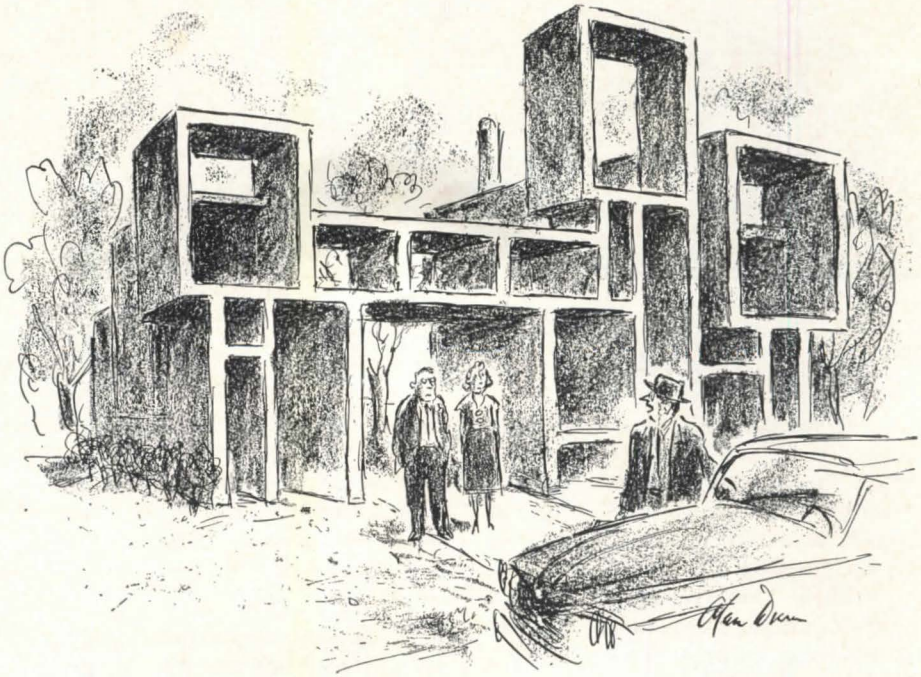
Despite all this, no one today would like to return to those times. But what can be done to alleviate the constantly increasing assault on the nervous system by the sounds of today? The following partial inventory of noise annoyances may serve to indicate what Sir John Q. Homeowner is up against.

The outer walls of his castle are assailed by the sounds of transportation: planes, trains, automobiles, trucks, ambulances and fire equipment; by the sounds of his neighbors: children, pets, power lawn movers, radio, television, parties and family fights; and by sounds of nature from birds and insects to wind and thunder storms.

Within the fortress walls, Sir Homeowner has additional noise to contend with. Noise sources within the home include dishwashers, garbage disposers, kitchen ventilators, food mixers, oil burners, air circulating systems, plumbing fixtures, radio and TV sets, musical instruments, air conditioners, the children, and possibly at times Lady Homeowner. (Of course, she may be annoyed by noise also, in which case Sir John belongs on the list.)

To battle intelligently with an enemy it is well to examine his modus operandi before deciding on a plan of attack. Sound originates at a source and travels to the listener by means of a path of some sort—through the air, through the building

continued on page 31



—Drawn for the RECORD *by Alan Dunn*

"One thing more—it still takes a heap o' livin', you know—"

Room design by Marvin Culbreth, N.S.I

Charter pecan paneling warms a room, too

. . . and you don't need money to burn. Enough for 12′ x 8′ wall costs only $65. Here's a tawny glow that invites a party or a festive family meal—a warmth that doesn't come from the fireplace alone. The walls radiate a golden air like summer sunlight. That's Weldwood® Charter® Pecan. A natural background for entertaining—or relaxation. A relative of hickory, rich in tawny swirls and figures, its full beauty is revealed by the Weldwood 18-step finishing process. And protected by genuine lacquer, it will stay lovely for a lifetime. That's why Weldwood paneling (100 different types available) is such a beautiful investment. Look for this name on the back of each panel.

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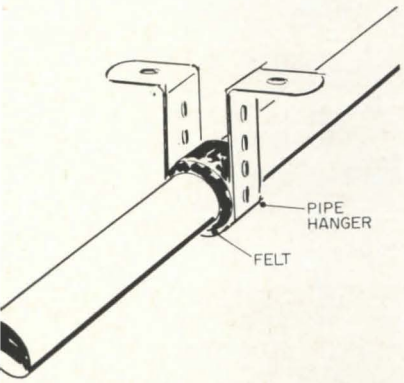
ucture or a combination of both. e basic plans of action, therefore, ɜ to quiet the source, to operate on modify the path of travel or to ıip the listener with a protective eld.

An example of the last mentioned thod of combatting noise is the ɜ of sound reducing ear plugs. Al-ıugh these are often used by city ellers, they have certain draw-cks, and are only recommended der extreme circumstances. Since ything that hampers the individ-



ılate *ALL* pipes from pipe hangers

l is to be avoided, we shall con-ler only the first two plans above ted.

It should be mentioned parenthetı-lly, however, that there is a fourth ın of battle against unwanted ise which has been promoted for rtain spaces. This is, in a sense, a nking attack or a feint. It consists deliberately providing another ise which will serve to mask or ver the annoying sound, making it s obtrusive. This plan has merit certain instances, but we feel it be out of place in the home. Noise ıs noise does not equal silence.

istance Reduces Sound

Obviously, it is difficult to do any-ing at the source about the ex-rior noises that impinge on the me. One cannot stop traffic, exert ntrol over the neighbors, or other-se muffle these sources outside the me. There remains, then, the path be considered.

Adding space between a sound urce and the listener is advan-geous. Theoretically, every dou-ng of the distance results in a duction of 6 decibels in sound pres-re level. Wind and other factors n vary this amount greatly. To oid a complicated discussion of chniques of sound measurement, decibels, etc., let it be said here that in general a reduction of 10 decibels may be considered as cutting the apparent loudness in half. An individual who builds his home adjacent to a major highway or off the end of an airport runway is asking for trouble, and often has it. The point of all this is that the house should be located as far as possible from the sources of annoying sounds.

Any Openings Spread Noise

Sound travels with great facility through small cracks and openings. The extent of this is a surprise to many people. For instance, a one square inch hole in a wall of 100 square feet will reduce the isolation of the wall by about 50 per cent. Doors and windows must seal tightly to eliminate such sound leaks.

Sound will pass through window panes with greater ease than through normal exterior wall construction. It is advisable to avoid large expanses of window on the side of a house facing annoying noise sources. Double glazing of windows is one method by which sound transmission along this particular path may be reduced. However, double panes such as are sold for thermal insulation are not particularly effective sound barriers. There should be a larger air space. Certain types of laminated glass recently appearing on the market show great promise in this respect. Under extreme conditions, well sealed storm windows are indicated.

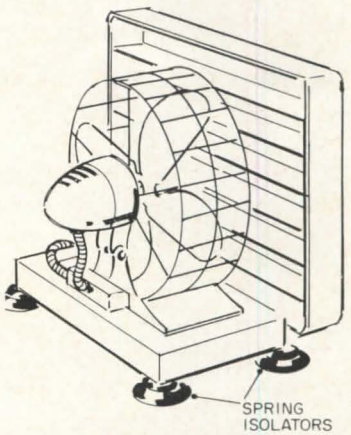
Planning For Sound Control

Many of the interior noises that assail the homeowner's ears can be greatly reduced through careful planning in the early stages. Today's compact floor plans tend to bring the noisy areas of a home in close proximity to the spaces where quiet is desirable. It is most disconcerting to hear a noisy toilet flush while eating in the dining room or entertaining guests in the living room. Therefore, the layout of the various spaces becomes important. The greater the distance that can be achieved between the living room and the kitchen, bath or powder rooms the less will be the difficulty.

At the same time these spaces need extra care in isolation measures, such as tightly fitting doors and good wall construction. Nowadays the dry construction wall is rapidly replacing the use of plaster. The old fashioned plaster wall was a much more effective isolator of sound than many of the new ones. However, there are various methods by which the dry wall transmission loss can be increased to more than "just adequate," such as laminated drywall techniques.

Back-to-back electric outlets on opposite faces of a wall afford passages for sound. So will a thin metal medicine cabinet recessed in the wall. These can be avoided in the planning or control measures introduced, such as coating the backs of medicine cabinets with damping compound.

The popularity of basement playrooms presents problems in the transmission of sound to the first floor areas. Often a ceiling of acoustical tile installed on furring strips is expected to be the answer. Unfortunately, this is not the case. Acoustical tiles absorb sound but also allow the sound to pass through, and although some slight reduction of noise may be observed in the upstairs area, it is not nearly as great as might be expected. A much more effective treatment is a ceiling of taped gypsum board. (Non-porous surfaces are required for sound barriers.) Then add acoustical tile for controlling the level of sound in source room.



Mount attic fans on elastomer mounts —floor mounting shown

Impact Noises

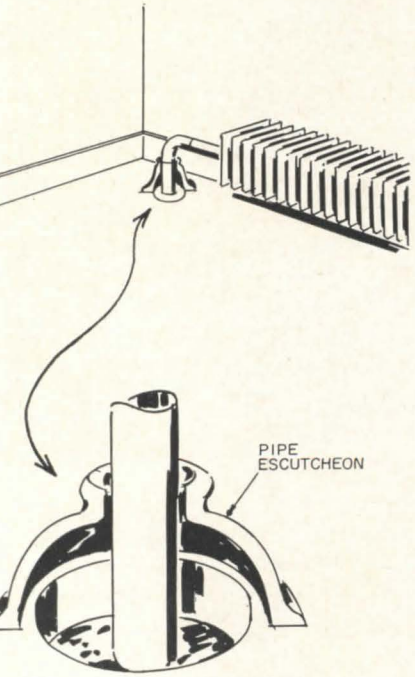
Between first and second floor areas there is generally a plaster or gypsum board ceiling, a sub-floor and a finish floor. Normally there are no problems connected here with the air-borne sound transmission presented in the average home. How-

continued on page 33

continued from page 31

er, there can be annoyance caused the impact sounds of footsteps—rticularly with the current styles ladies' high heels. Here, the irce can be muffled by requiring e removal of the shoes—which is a st unlikely solution. The simplest y to operate on the sound path is use well-padded carpet on the ond floor. Resiliently hung ceilgs are also effective but are selm used in home construction beuse of expense.

To sum up what has been said so r: noise control begins in the early nning stage with the room layout d continues with the construction ensuring tight fitting doors and ndows, adequate walls and absence sound leaks. A degree of supervion is required throughout these ages because most contractors and b-contractors understand little out the nature of sound or what easures are required to control it. As pointed out earlier in connecon with exterior noises, a great deal sound can leak through small enings. Such leaks are quite prevant around piping. Oversized holes e made in walls to admit pipes into room and covered with escutcheon ate convector covers, or fan-coil it covers. Although one cannot see to the opening, the escutcheon alws sound to pass freely into the



ON'T MAKE
IPING HOLES OVERSIZE!
or increased sound isolation, pack le with glass fiber wool—maximum olation is obtained by capping glass ber with high-temperature cement

space with the possibility that it will emerge somewhere else in the house. Care must be taken to seal all such openings with grout or caulking compound.

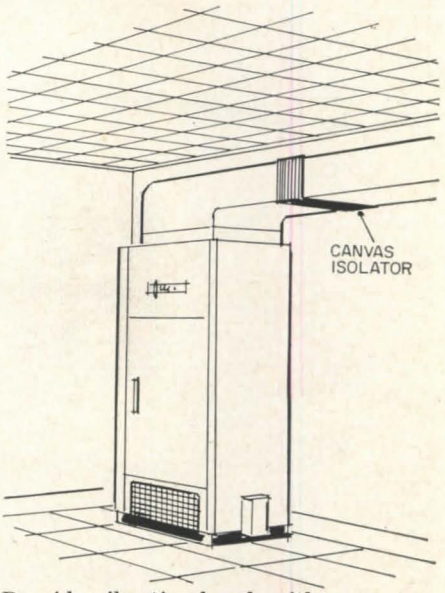
A further point should be brought up at this time: the use of sound absorbing materials such as acoustical tiles. Although these materials do not block the passage of sound to any great degree, they are useful, in fact often essential, in a noise reduction program. No wall is absolutely "soundproof." At best, a wall reduces the sound energy which passes from one room to another. If neither room has much absorption in it, the room reverberation, in effect, amplifies the sound that is present or which arrives through the wall. Most living and bedrooms contain rugs, upholstered furniture and draperies which all contribute sufficient sound absorption. Other spaces such as kitchens, playrooms and baths could benefit by the addition of acoustical ceiling.

With the structure of the house planned and built there are a number of mechanical noisemakers installed which need consideration. Many of these can be selected on the basis of being the quietest operating of several acceptable styles or models. Included in this category are oil burners, garbage disposers, toilets, kitchen or bath exhaust fans and refrigerators. Dishwashers, stainless steel sinks and other appliances involving large expanses of sheet metal can often be quieted by the application of damping compounds to the underside of the metal surfaces. It would appear that some manufacturers have taken steps to do just this.

It is advisable that dishwashers, and laundry washers and dryers be set against an exterior rather than an interior wall. In this position, near the supported edge of the floor structure, the vibration forces transmitted by the floor will be reduced.

Noise in Heating Systems

In warm air heating systems a fan is employed to move the air. All fans generate noise; some more, some less according to their design. The noise travels down the ductwork and emerges into the various rooms. Prefabricated sound traps or sections of acoustically lined ducts can be employed very effectively to reduce the amount of sound transmitted. Both



Provide vibration break with canvas on all hot air ducts at or near furnace on hot air systems

supply and return ducts must be considered because the noise will travel in both directions. Flexible canvas or asbestos cloth connections must be used at the furnace casing to avoid transmitting vibrations into the ductwork which will emerge as noise. Grills and registers can produce noise due to turbulences caused in the air passing over them, and should be selected for quiet operation.

While on the subject of ductwork it should be noted here that registers to various rooms should not be in close proximity on a common duct without a sound trap in between them. Air ducts form giant speaking tubes and allow sounds to pass freely from one room to another. Indeed, so efficient are they that one enterprising company is offering a loudspeaker to be installed in the ductwork so that every room will have music from a single hi-fi or radio.

Hot water heating systems employ circulating pumps which again are more or less noisy according to their design. It should be possible to choose one for quiet operation so that the sound is not carried along the piping.

Hot water systems sometimes develop annoying creaking sounds due to expansion and contraction of the pipes when they are solidly clamped to the structure. A simple remedy for this is to wrap the pipe with felt wherever it is clamped.

Equipment such as attic fans and

continued on page 36

FiLite LUMINOUS CEILINGS BRIGHTEN APPEAL OF MEREDITH VILLAGE HOMES

Glowing ceilings of FiLite fiberglass diffuser panels are prospect-attracting features in the 155 homes of Meredith Village, $6,000,000 residential development in Orange, California.

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FiLite panels are used exclusively in Meredith Village homes because "quality styling and constructional integrity is traditional with the Meredith Company". A product of Filon Corporation... FiLite panels are superior in every way. Panels are "Luminous White" in color and reinforced with new "Water Clear" fiberglass for the ultimate in uniform light diffusion. Additional reinforcement with exclusive parallel nylon strands assures a *lasting look of lighting beauty.*

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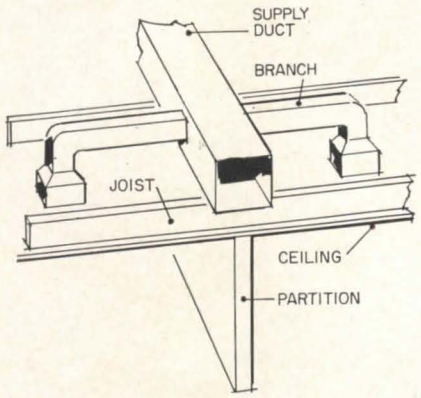
Sound Conditioning

continued from page 33

heat exchangers often induce vibrations into the structure which result in a generally pervasive noise. Resilient mountings will eliminate most of these annoyances.

Noise From Appliances

Two noisy pieces of apparatus are commonly brought into the home by the owner: a kitchen mixer and a vacuum cleaner. Noise from the mixer may be reduced by placing a soft rubber or felt pad between it and the counter top. In this way the sounding board effect of the counter will be reduced. No one has as yet effectively reduced the noise of a vacuum cleaner. However, if the homeowner wishes to splurge, he can have a built-in vacuum system with hose outlets in each room. The noise generating equipment can be located in the basement or elsewhere.



A typical duct installation, such as this conducts sound from room to room, and for good sound control should not be used. Avoid cross-talk problems between rooms by not using branches from a common duct that are directly in line—a glass fiber lined duct helps reduce cross-talk

The hubbub, clatter and roar of modern times is constantly on the increase and the point has been approached where people will be willing to pay a premium for peace and quiet, particularly in the home. At least one forward-looking developer, conscious of this fact, is selling "sound-conditioned" homes in which considerable thought has apparently been given to many of the items mentioned.

The means and techniques of quieting are here and if the prospective homeowner demands it we can achieve restful quiet.

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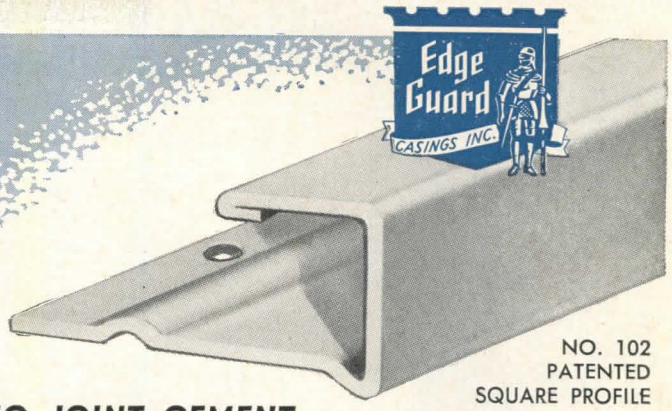

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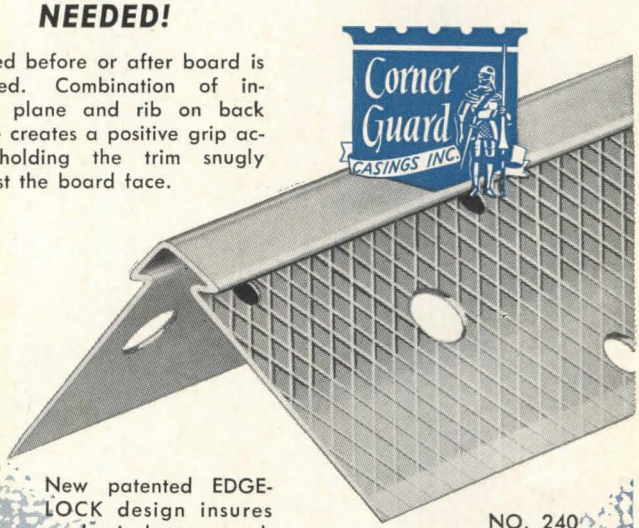
NO JOINT CEMENT NEEDED!

Applied before or after board is installed. Combination of inclined plane and rib on back flange creates a positive grip action holding the trim snugly against the board face.



New patented EDGE-LOCK design insures mechanical cement adhesion by means of cement holes under the nose and undercut design.

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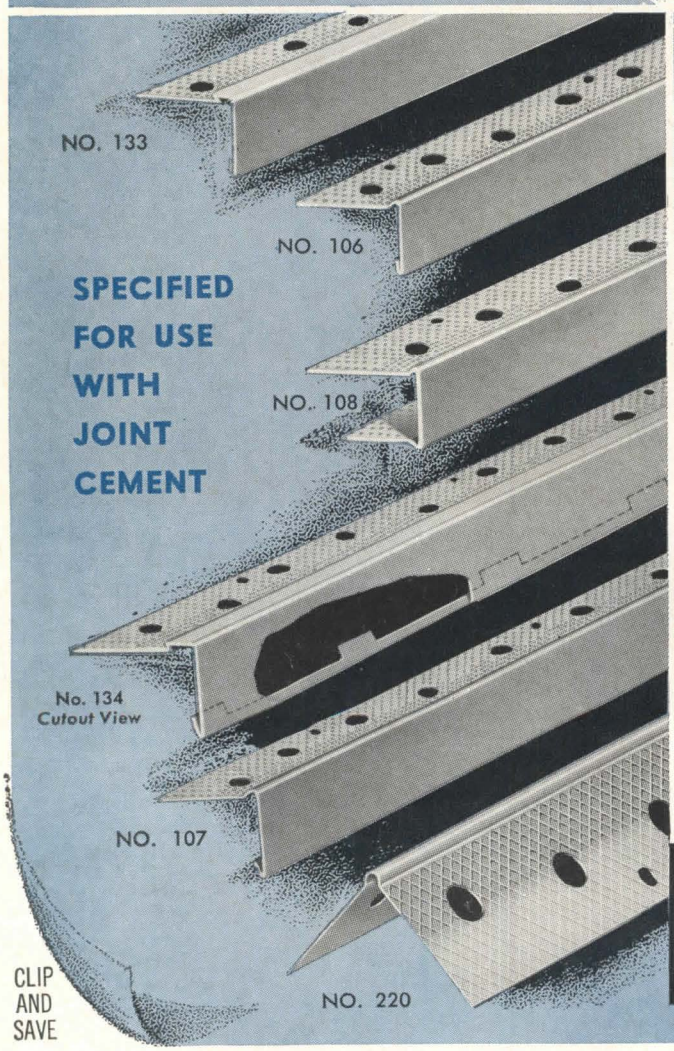
EDGE-LOCK



SPECIFIED FOR USE WITH JOINT CEMENT

NO. 133 "L" SHAPE Same patented EDGE-LOCK features as No. 240 corner guard.

NO. 106 "L" SHAPE Applied after board is installed.

NO. 108 "U" SHAPE Extra flange provides additional stiffening and strength.

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Designed by Paul Hayden Kirk

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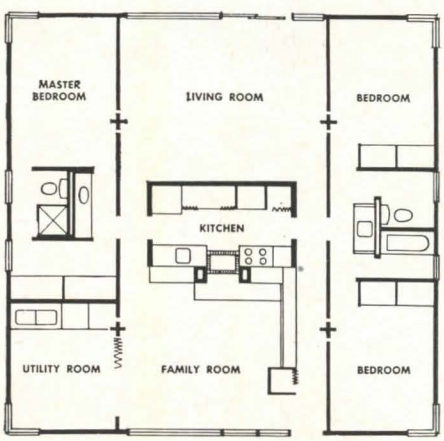

home that states a new tradition in wood.
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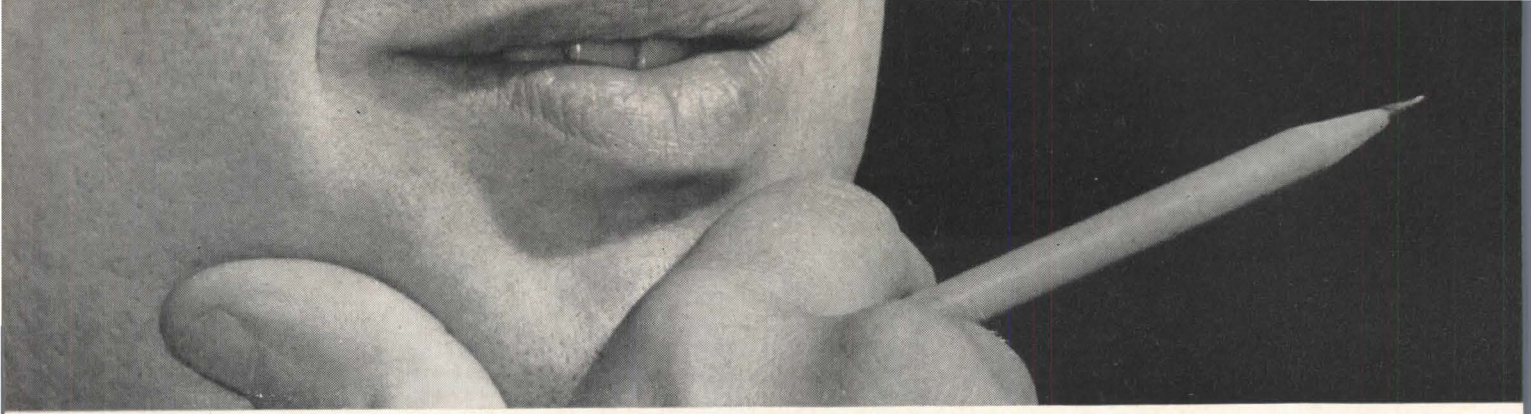

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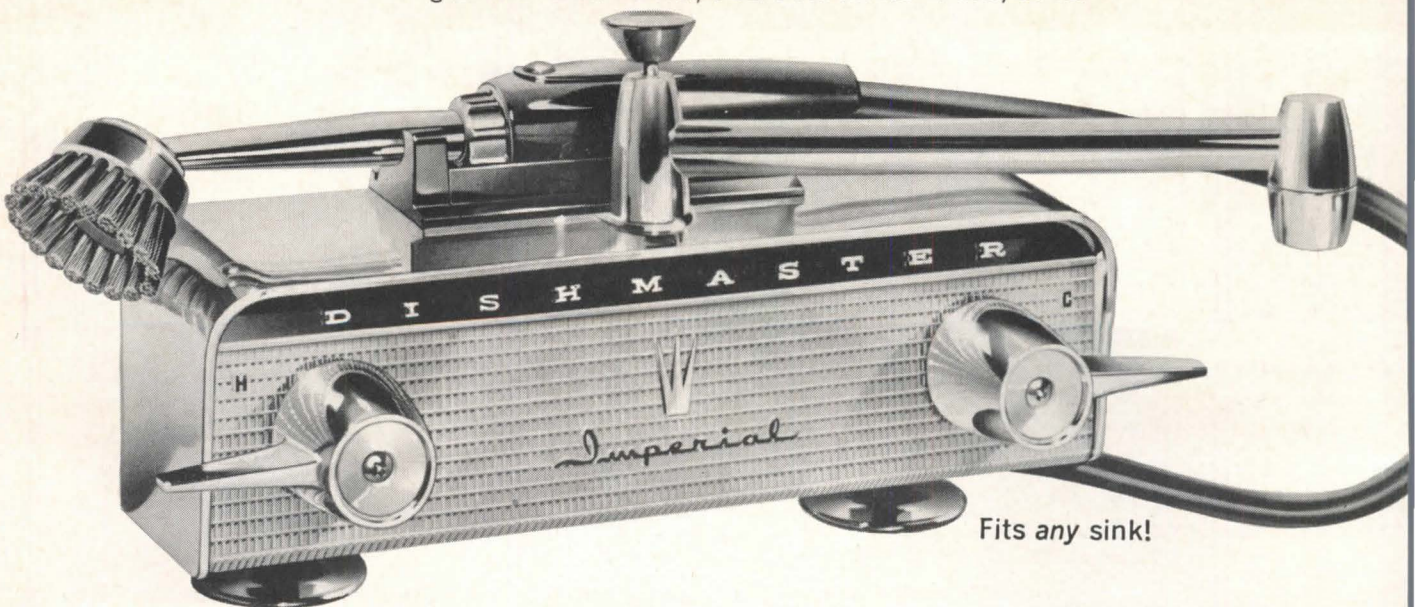

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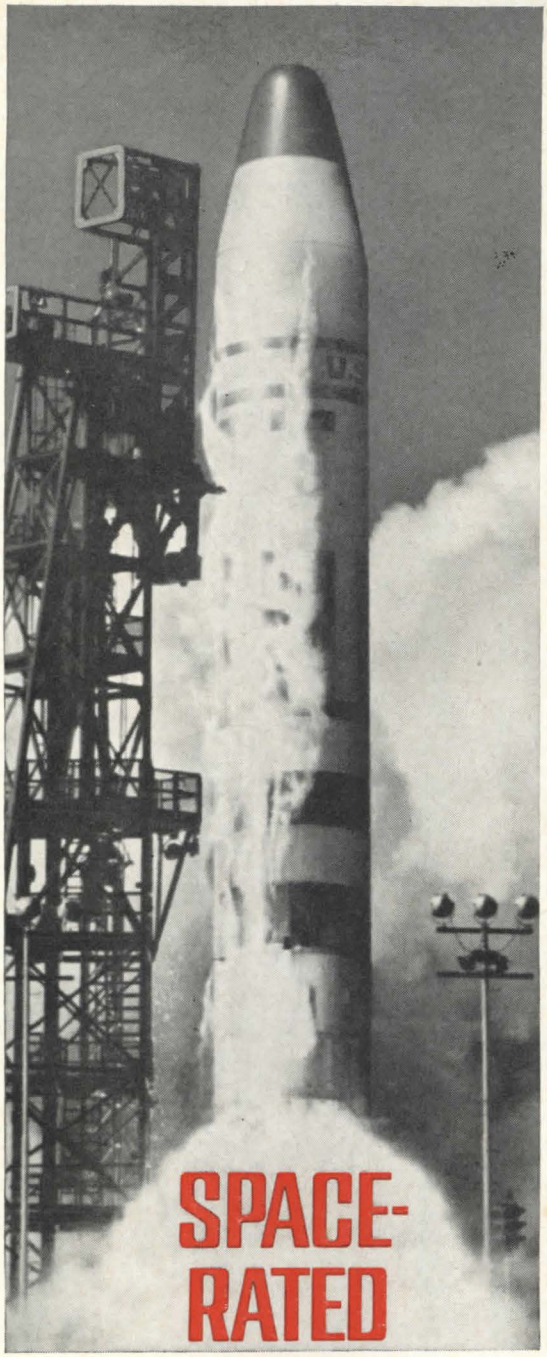

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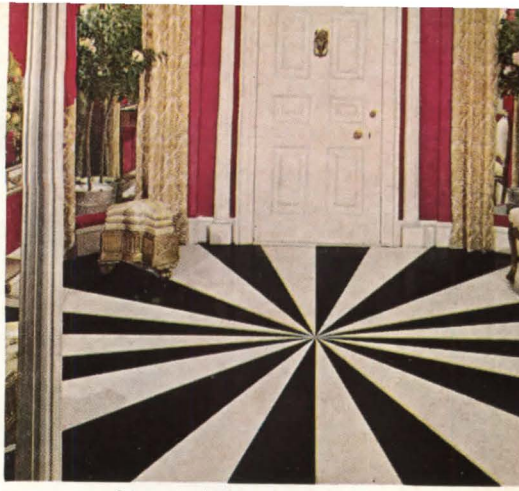

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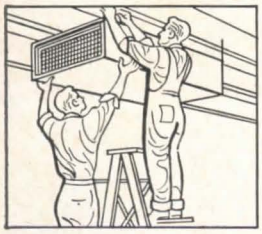
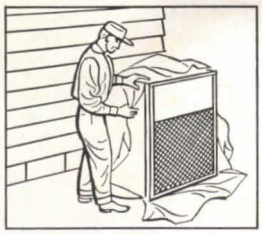
Chromalox Season-Aire installs quickly, easily



Central-Air Unit ceiling mounts in basement; supplies base heat load, cooling, electrostatic filtering, humidification and deodorizing.



Cool-Air Chiller mounts outdoors; pumps refrigerated solution to cooling coil in Central-Air Unit; provides cooling and dehumidification.

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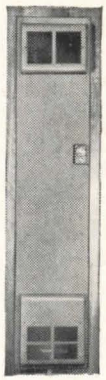

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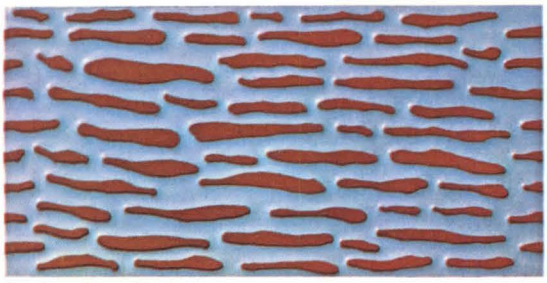
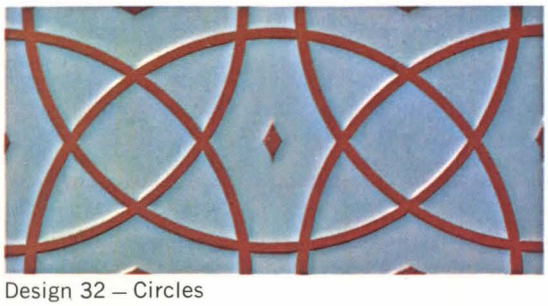
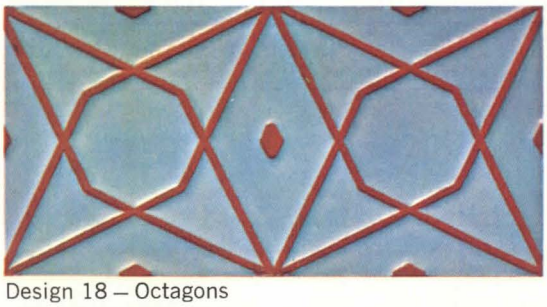


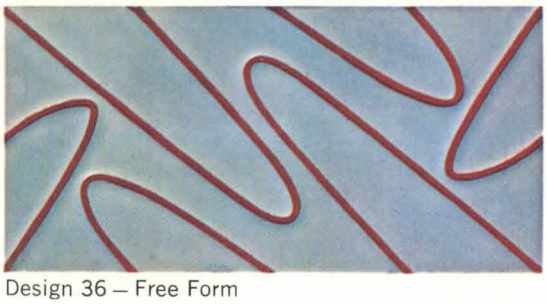
Design 04 – Bark



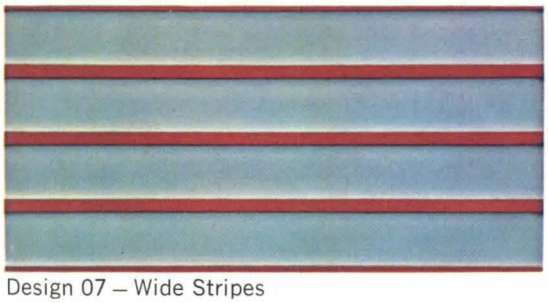
Design 32 – Circles



Design 18 – Octagons



Design 36 – Free Form



Design 07 – Wide Stripes

Design 20 – Thin Diagonal Stripes

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13 BASIC COLORS
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204 – Blue

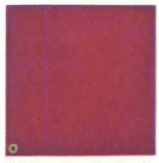
005 – Yellow

105 – Moss Green

401 – Grey

501 – Dark Brown

108/s – Speckled Dark Green



302 – Dark Red

601 – White

205 – Cobalt Blue

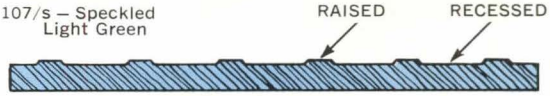
006 – Orange

402 – Black

603 – Cream

107/s – Speckled Light Green

The unglazed raised lines of the designs form a safety, non-slip Paver surface preventing wear or damage to the recessed color-glazed portion of the designs.



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RECORD HOUSES OF 1963

ARCHITECTURAL RECORD'S annual *Awards of Excellence for House Design* is proudly presented to the architects and owners of the 20 fine contemporary residences in this issue. This marks the eighth consecutive year of these awards, and, we firmly believe, continues to reflect the creative vitality of American architects in this field. In their selection from among the great number being built throughout the country, every effort has been made to reflect the widest range of design, cost, geography and structure. We have also sought to ferret out the work of bright, new talent, as well as buildings by the better known practitioners. The costs of the houses range from $14,000 to over $100,000.

Five of the awards were again given to architect-designed development houses, and the issue is going to 20,000 builders in the interest of promoting better design and cooperation in this vital area. A book-store edition will also be available to the public, as in the past.

We also wish to express again our warmest appreciation to the press all over the country for their efforts to help us promote better designed and planned houses through the RECORD HOUSES program.

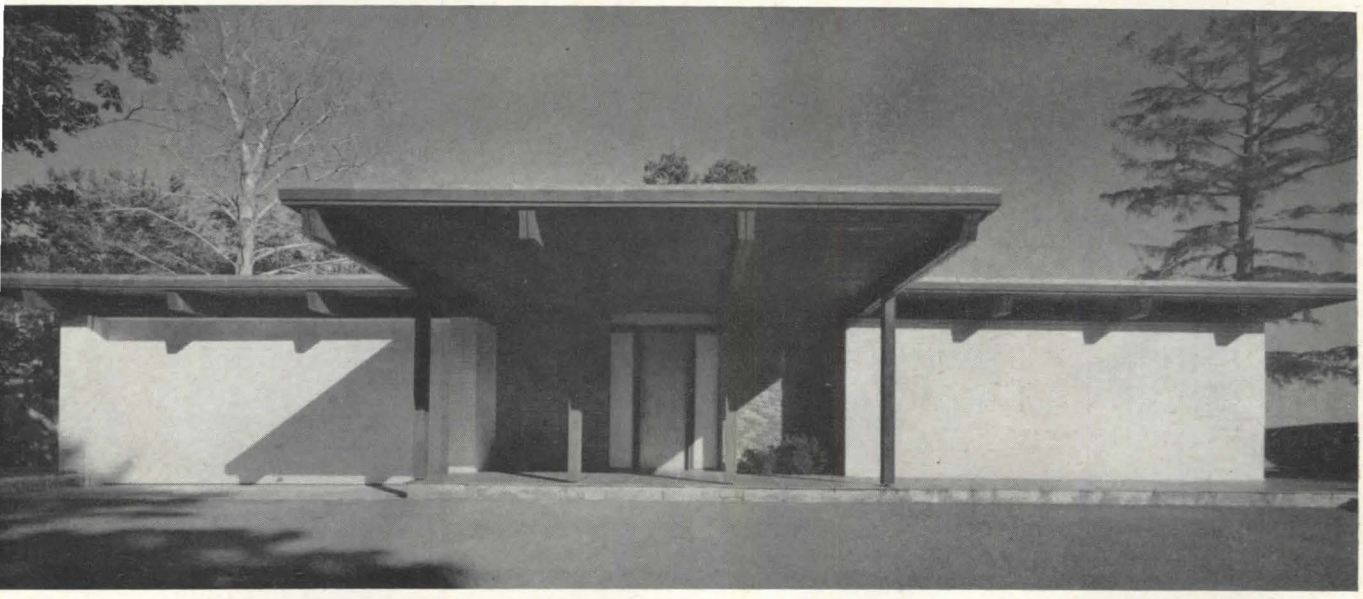
HERBERT L. SMITH JR.

ARCHITECTS: G. P. JENNEWEIN & J. J. JENNEWEIN

RESIDENCE FOR MR. & MRS. SEYMOUR KIMMEL

New York City Suburbs

SEASIDE HOME IN THE CLASSICAL TRADITION

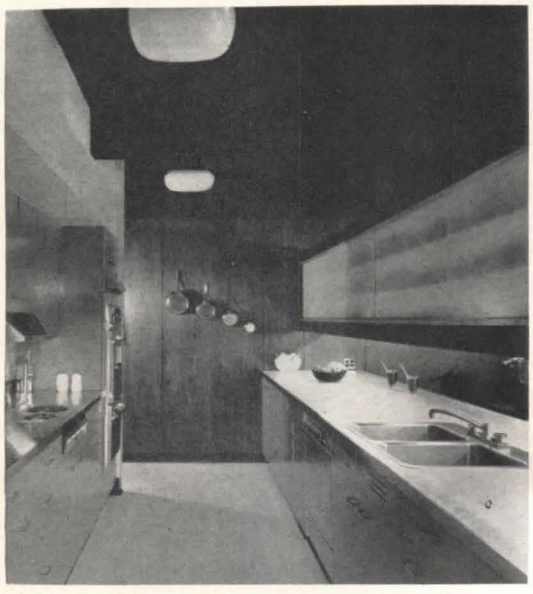


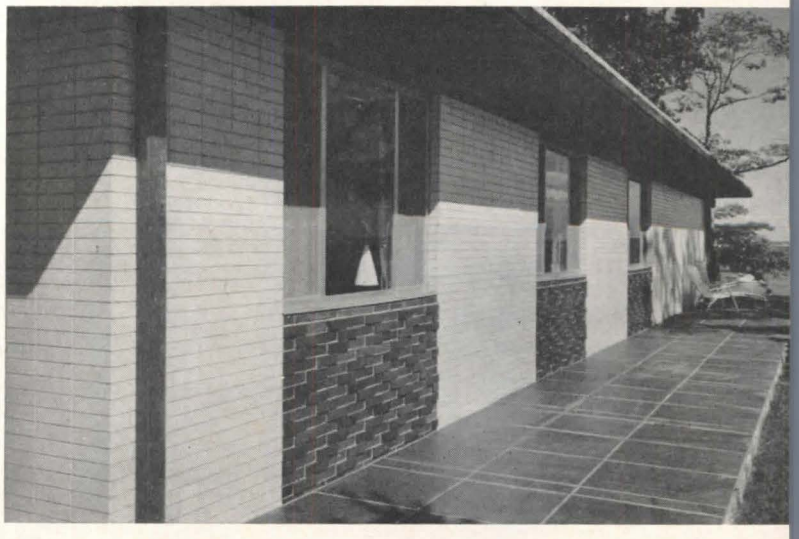
RC NEUHOF PHOTOS

any of the design concepts in this house on e shore of Long Island Sound stem from ecedents in the Roman homes of centuries o: a stone platform, or podium, for the base the house; a blank front facade for privacy; d the open countyard, or atrium, with its ol. One could also include the use of white arble floors throughout the central portion the house in this category. In this house, e classic influence is a direct one: Peter nnewein studied in Rome as a Fulbright rantee and practiced architecture there for o years before returning and setting up his ice in the United States.

These ideas work well for the site. The only ew is to the rear of the lot—but it is a autiful one looking towards Long Island d the New York City skyline. The living room, master bedroom and one of the dining areas have completely glass walls on this side. The other three sides of the lot, however, needed shielding for privacy. The court thus forms a beautiful relief from a possible closed-in feeling in this part of the house. The plan is divided into three activity zones with the central one devoted to the social areas and circulation. The "private zone" is to the right of this (and most distant from the road). This part consists of bedrooms, dressing areas, bathrooms and study. The "work zone" to the left contains the kitchen, maids' suite, laundry and garage. The heating and air-conditioning equipment is located in the basement. All construction is precise and handsomely done, and was supervised by the owner, a prominent builder of New York apartments.

FINE FINISHES AND DETAILS QUIETLY ACCENT DRAMATIC VISTAS THROUGH THE HOUSE



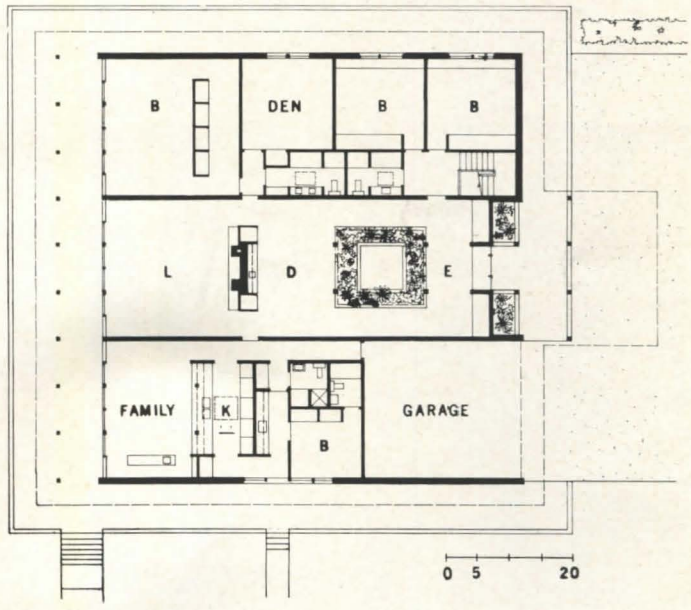


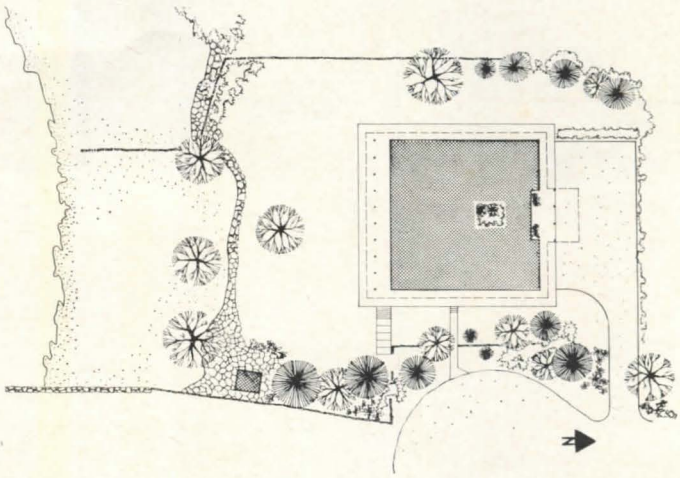
MARC NEUHOF PHOTOS

The plan of the Kimmel house provides for an extremely pleasant, and almost ceremonious sense of "arrival." The house is largely screened from the road by trees and planting. On turning into the property, one comes upon a large motor court and the solid and quiet facade of the house with its big cantilevered overhang for a *porte cochère*. On entering, one is faced with the light-splashed planting in the court, then on turning into one of the side passages, a view is opened to the sea. In the living area, the furniture (topped by a wood lighting grill) is carefully placed to keep this vista open.

The stone base of the house is terraced with black slate. The structure is wood post and beam, with a 6-foot 8-inch modular spacing of columns. Walls are brick veneer. The roof deck is wood on exposed beams, and the main level floors are marble or wood except for vinyl in the kitchen and tile in the baths. The interior walls are walnut plywood and white painted plaster. Window sash is aluminum. Bathroom counters are marble.

The basement contains the gas heating and air-conditioning equipment, as noted before, plus a playroom and storage; it has an area of 2,000 square feet in all. The main level, including the two-car garage, has a total floor area of 3,600 square feet. The site measures roughly 140 by 240 feet in an irregular shape, with a 100-foot-wide sand beach at the back.





A HOUSE OF CONVERTIBLE PAVILION ADAPTS TO CLIMATE AND FUNCTIO

ARCHITECT: VLADIMIR OSSIPOFF

Residence for Mrs. Blanche Hill

Honolulu, Hawaii

CONTRACTOR: *S. Miura*

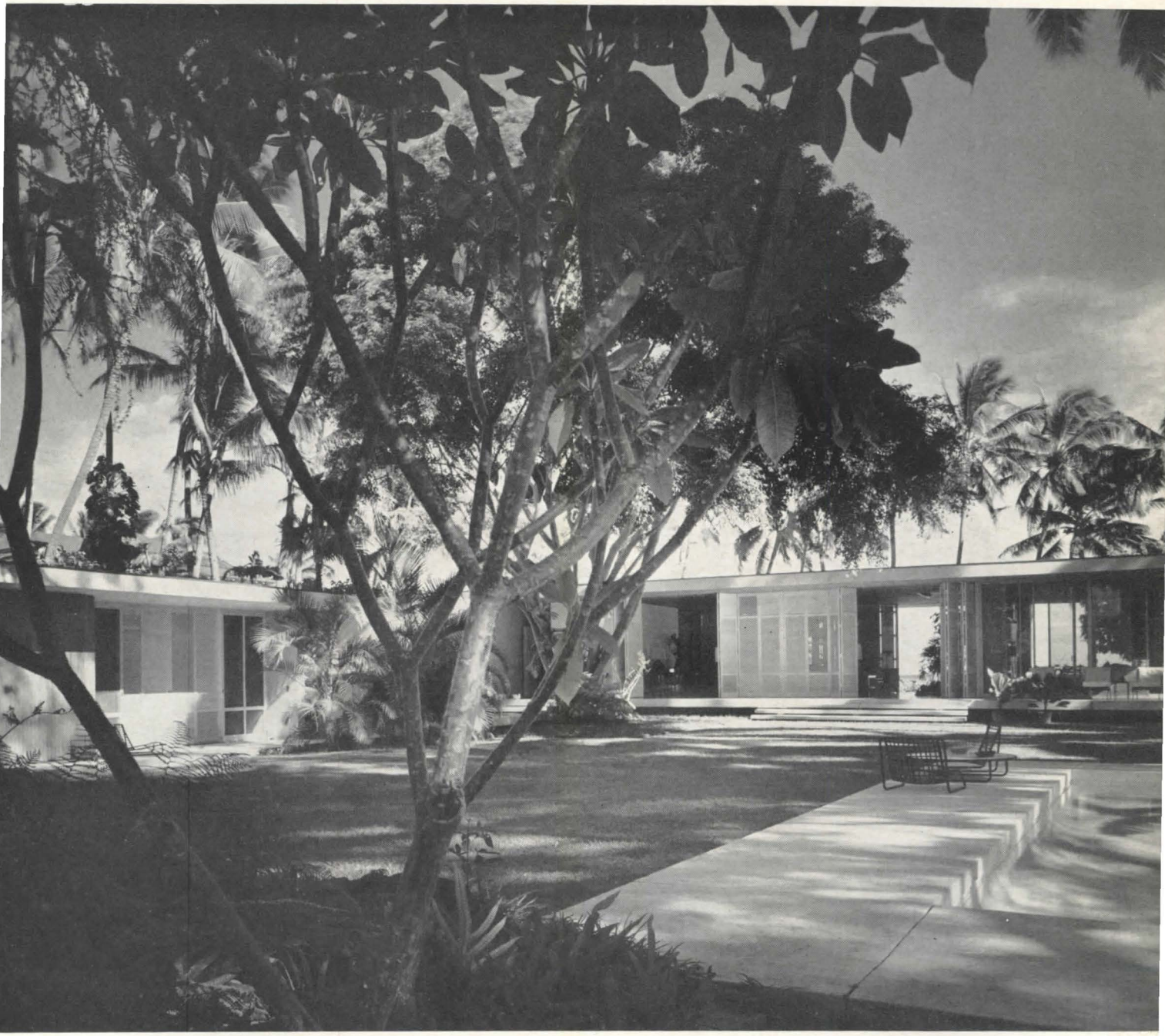
LANDSCAPE ARCHITECT: *Richard C. Tongg*

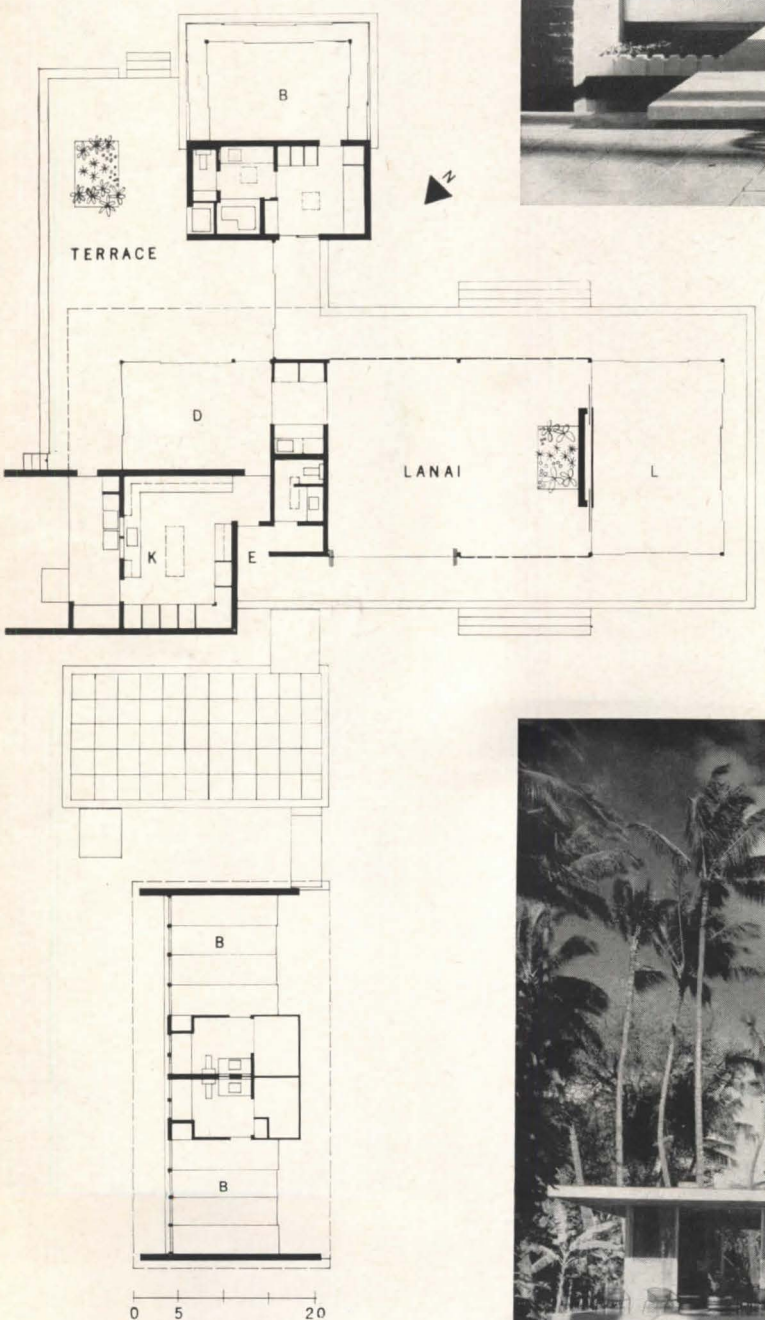
A lot of surprising features are incorporat into this quietly elegant house. Major livi areas form a sort of "living porch" which c be opened or closed, as desired, by a series adjustable panels. Other parts of the hou are in separate pavilions linked to this sh tered platform; the unit containing the mast bedroom suite is connected to the living secti by a glass-roofed walk to emphasize its bei apart while still giving weather protection. guest house is entirely separate.

These basic planning concepts stemm from the requirements of the owner: the ho was to be a second house for use several mont of the year, and was desired to be as inform and open as possible; it was to be arranged a manner giving maximum convenience for t owner to live there alone, or for her to ha house guests quartered in a separate cottage give them independence and to interfere wi normal daily life as little as possible.

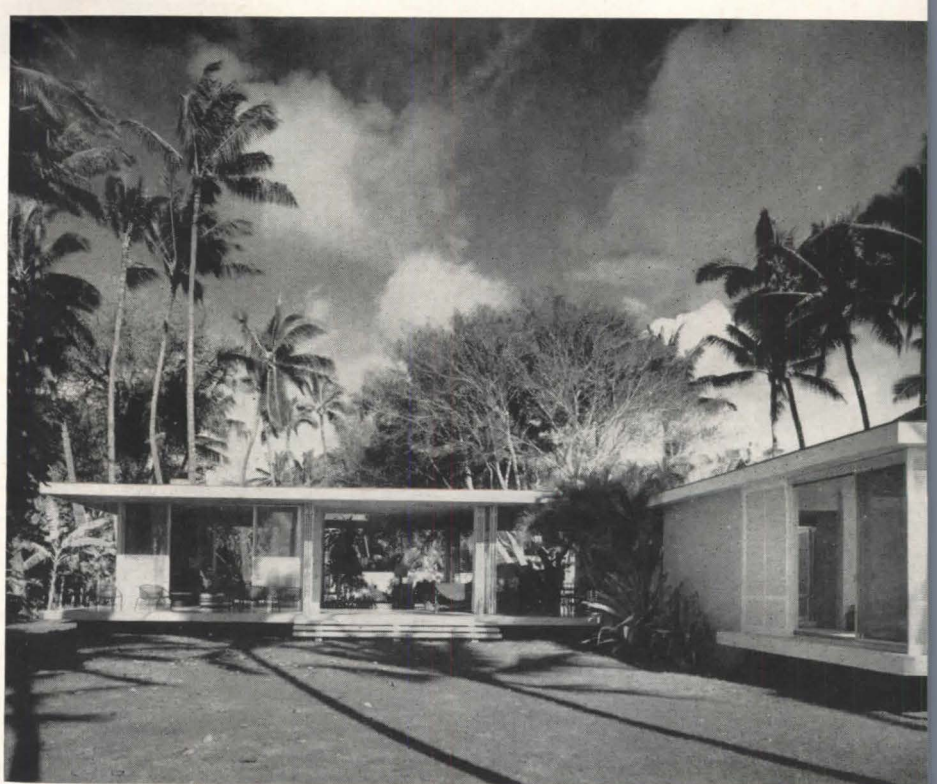
As built, the house is a handsome and a propriately understated design, and extreme well adapted to expansive indoor-outdoor li ing and its lush ocean front setting. Howeve this very quality of attractive openness h created problems. On this, the architect stat that, "the client was warned and was willi to suffer certain inconveniences for the sa of openness of the house. It is expected that bad storms, the lanai area connecting the di ing room and living room areas will have wat infiltration through and under the foldi shutters, hence the terrazzo floor which can easily mopped up."

R. WENKAM PHOTOS





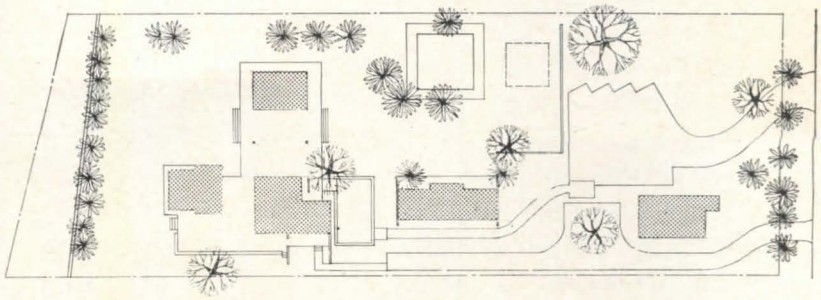
TROPICAL GARDEN ROOMS ADD PRIVA
AND SPACIOUSNESS TO HOU



R. WENKAM PHOTOS

The units of the Hill house were arranged so that a variety of vistas and areas are revealed in sequence as the visitor approaches. As can be noted in the plot plan (*right*), the approach is from the parking area and garage, past the guest cottage on the far side of the garden. An Italian bas-relief is incorporated in the wall along this area. As one arrives at the entrance terrace with its tall banyan tree, a turn to the right reveals the garden and swimming pool; and from the lanai, there are views of the ocean and two partly enclosed gardens. The main house is raised a bit, and has a floor slightly cantilevered from its foundations to look lighter.

The house is constructed on concrete foundations, with walls of hollow concrete block and tongue-and-groove redwood. Interior partitions are wood and plasterboard, ceilings are teak flooring, and floors are terrazzo or vinyl tile. The living room, dining room and bedrooms have sliding glass doors as well as shutters, and the master bedroom is air conditioned. The cost was about $100,000.



MORLEY BAER PHOTO

RUGGED ELEGANCE KEYNOTES MODEL DEVELOPMENT HOUSE

The strong, handsome character of this house amply fulfills the owners' outline program for a display home for their development at Lake Tahoe. The owners felt that: "The exterior should be straightforward, yet with distinguishing character. Applied trimmings should be held in great restraint; we do not want a house that identifies with any set style."

As a pilot development house, the structure was planned to accommodate a family of four or five, plus some space for guests. It was also to be adaptable to other sites. The plot on which the house is built is an arc-shaped one with a beautiful view of Lake Tahoe; thus, the plan as developed understandably turns all rooms toward the glass wall overlooking this vista.

The principal force in the design comes from the strongly expressed, two-story post and beam structure, and walls of diagonal redwood siding. This same siding also forms the interior wall surfaces in the living areas. Both frame and siding are rough textured. To further accent the frame, the laminated two-by-four ceilings and wallboard partitions are painted white.

The house was developed with Better Homes and Gardens as a co-sponsor with the owners.

ARCHITECTS: KNORR & ELLIOTT

Development house for J. H. Pomeroy Company

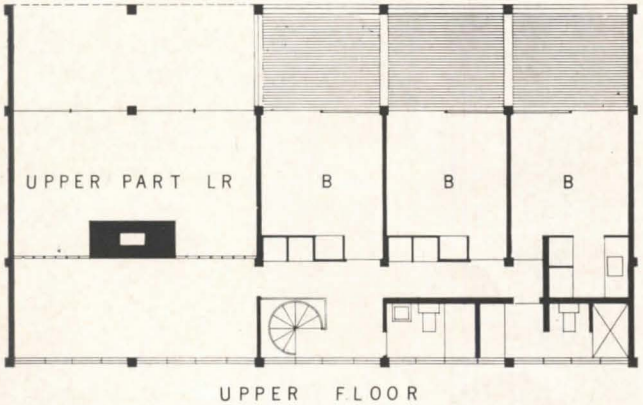
Tahoe Keys, California

STRUCTURAL ENGINEER: *Stefan J. Medwadowski*

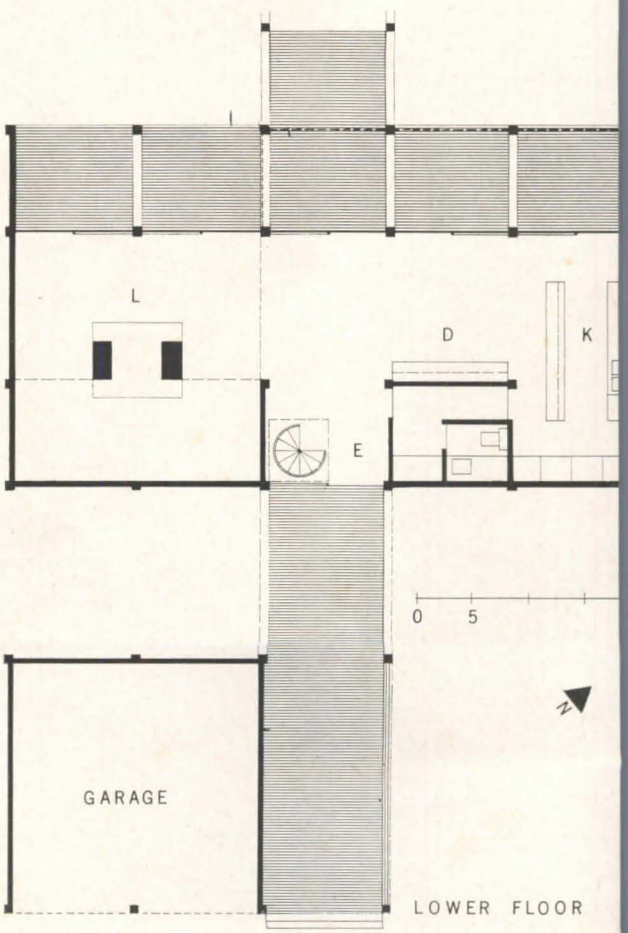
MECHANICAL ENGINEER: *Alex Boome*

CONTRACTOR: *John Speck*

LANDSCAPE ARCHITECT: *Sasaki-Walker & Assoc., Inc*

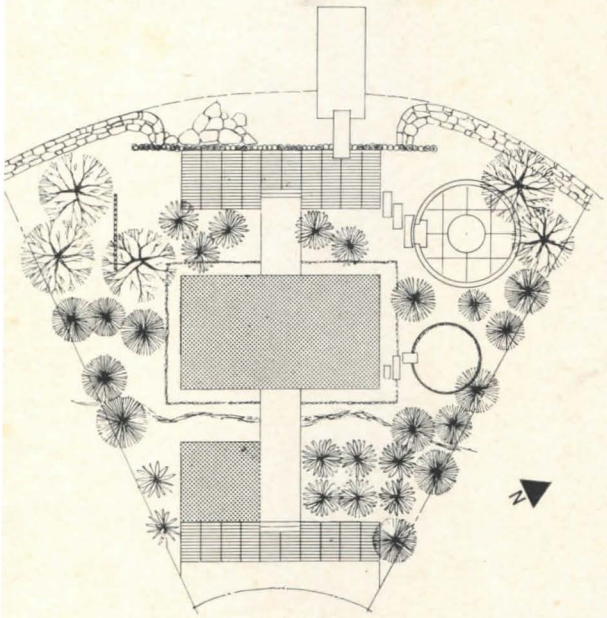


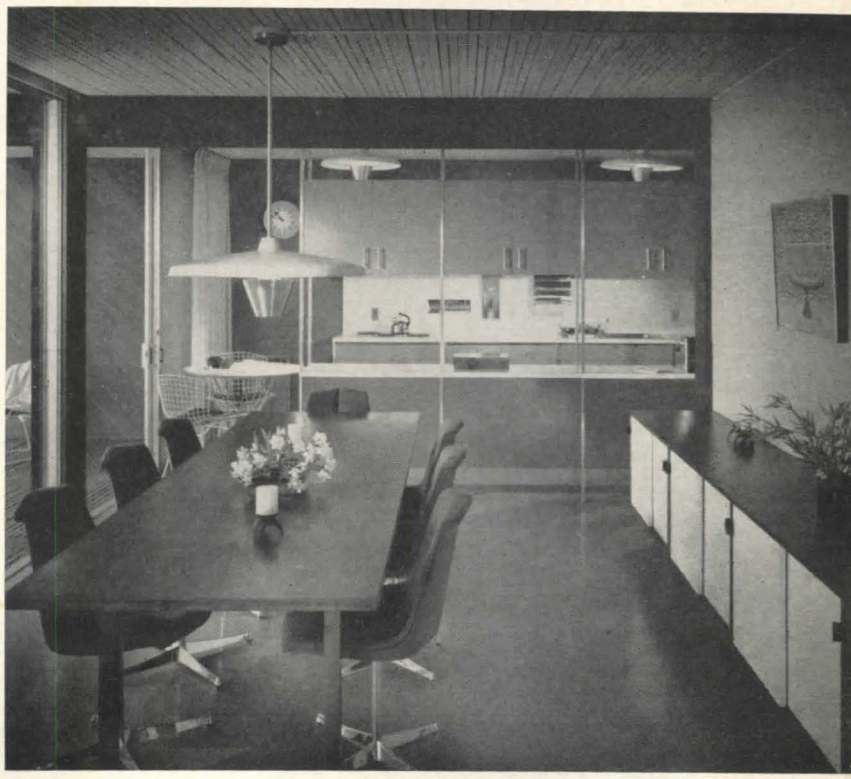
UPPER FLOOR



LOWER FLOOR

MORLEY BAER PHOTOS





A SPACIOUS, OPEN PLAN FITS INTO A COMPACT STRUCTURE

The entire lower floor and part of the upstairs of the Tahoe Keys house are one big, open space. "Rooms" are mainly created by drastic changes in ceiling heights, and by the "look through" fireplace and kitchen cabinets. Three living areas of different characters are created by this method: a balcony sitting and lounge area; a tall, open room which visually adds the adjoining deck to its space; and a sort of cave-like "inglenook" rimmed with built-in seats which is beneath the balcony.

Outdoor sitting decks are created for each of the upstairs bedrooms by extending the ceiling/floor plane over the dining area out across the open deck at the back. All in all, the plan is an extremely simple and workable one.

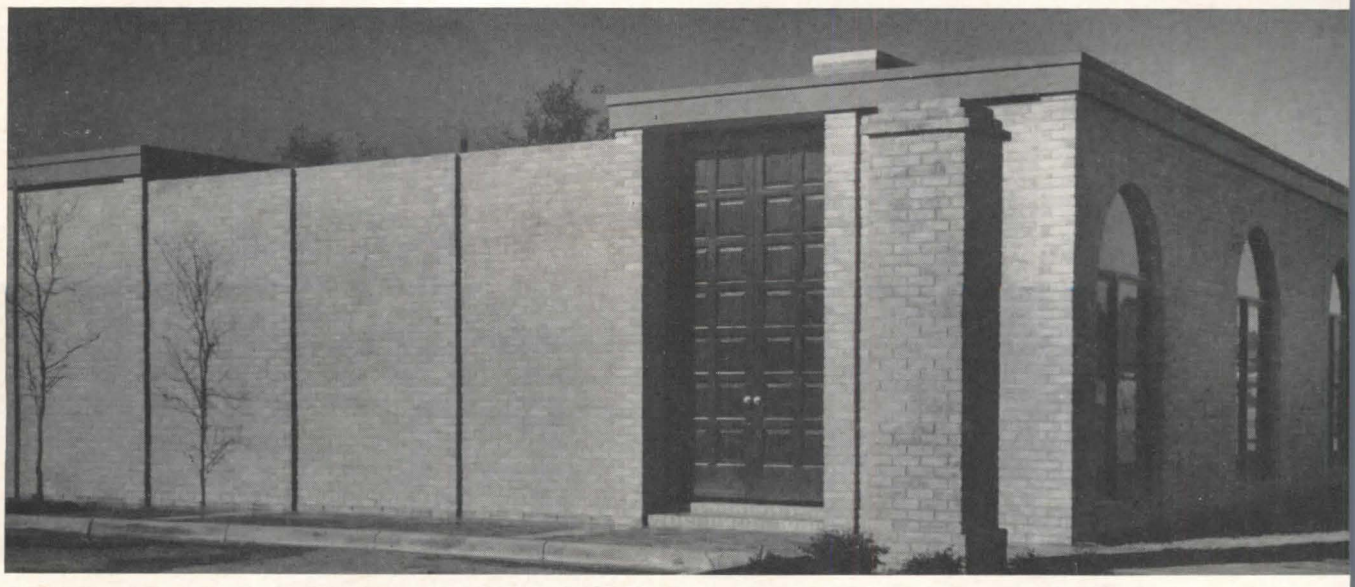
The facade of the house is also very simple and effective. A very narrow band of high windows, just under the top beam, and a glass door and panel at the entry (note indications on the plans) are the only variations from the end walls. The entry is connected to the garage by a bridge-like covered walk. The approximate cost was $45,000; excluding lot, landscaping and furnishings.

WALLED-IN PRIVACY FOR A HOUSTON TOWN HOUSE

The traditional "townhouse" concept has been very successfully revived in this southern house, one of a group of custom-designed row houses for a Houston development planned by the architect. Stylistically, the houses are all quite contemporary, but the use of similar and fairly traditional materials gives a unified, almost "timeless" quality as seen in the sketch and plot plan on the next page, and in the photographs shown here.

The development is built in the midst of a typical city sub-division which has large lawns and traditional houses built out to 10 foot restriction lines at the sides of each lot. By planning this new development as a unit, it w possible to extend the encompassing walls each house to the lot lines. A communal swi ming pool and recreation pavilion are plac at the center of the development. Service alle range the back of each block of houses.

This house is built on a corner lot of the ar on a site measuring 45 by 75 feet. To minim the space required, a carport was devised parking sideways at the back, off the serv alley. Vistas are provided for each room ins the house by a series of patios formed by col nades of brick arches. The arches ca through the house as a design motif.



EDWARD A. BOURDON PHOTOS

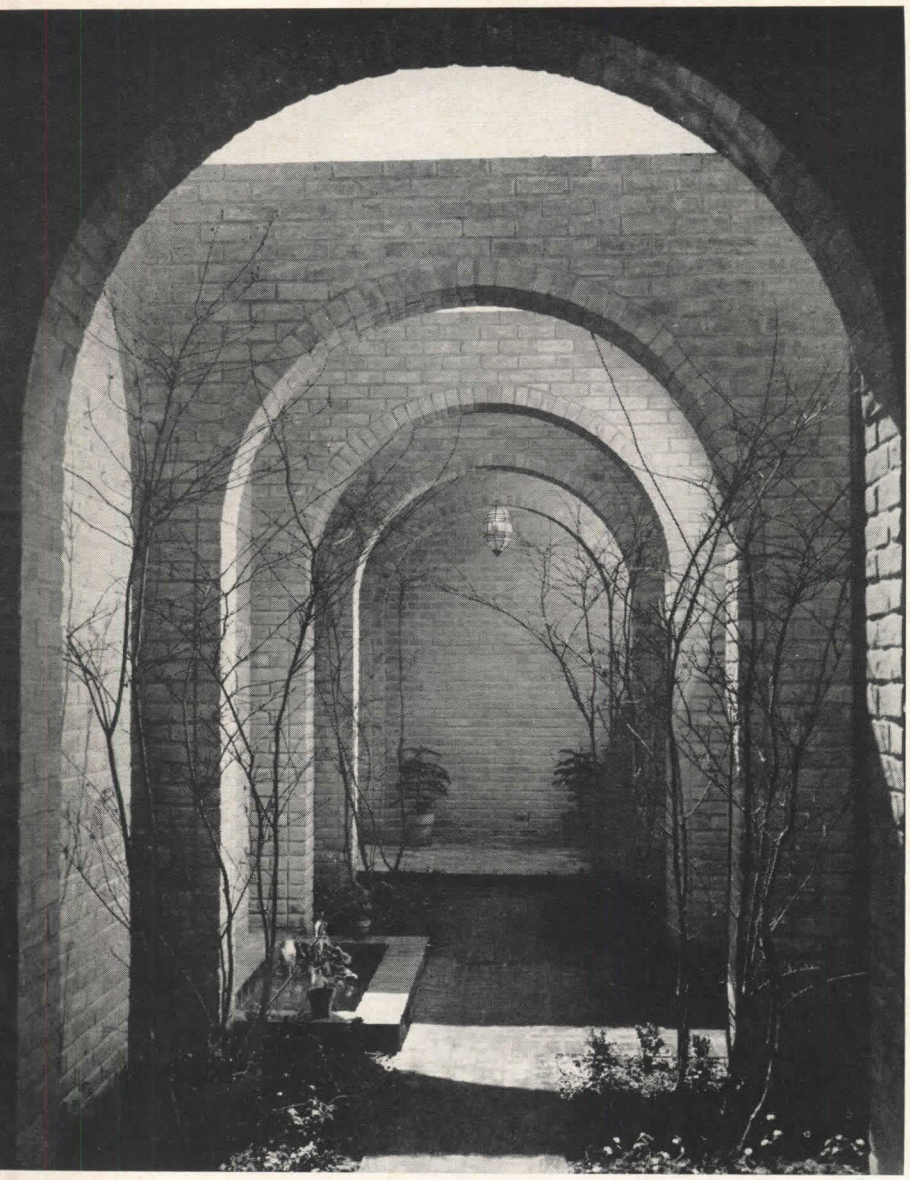
ARCHITECTS: P. M. BOLTON ASSOCIATES

Residence for Mr. and Mrs. Preston M. Bolton

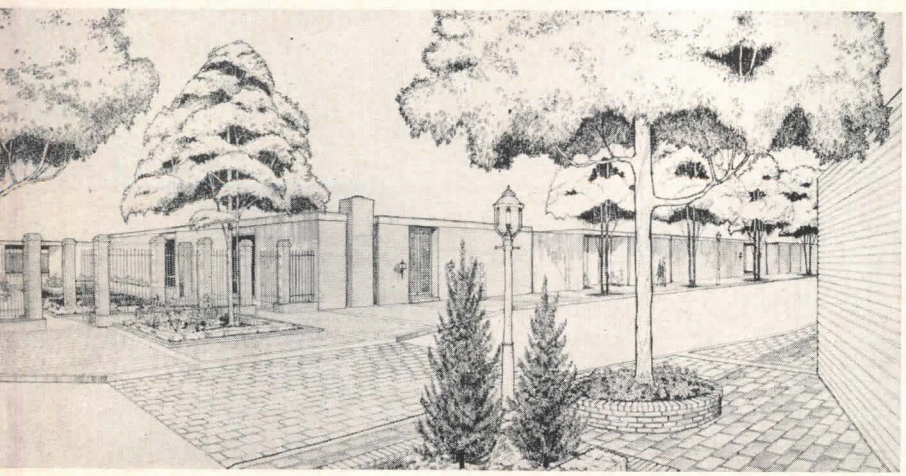
Houston, Texas

STRUCTURAL ENGINEER: *R. George Cunningham*

CONTRACTOR: *Stewart & Stewart Construction Company*



EDWARD A. BOURDON PHOTOS



THREE PLANTED COURTYARDS PLUS SKYLIGHTS GIVE OUTDOOR FEELING TO ENCLOSED ROOMS

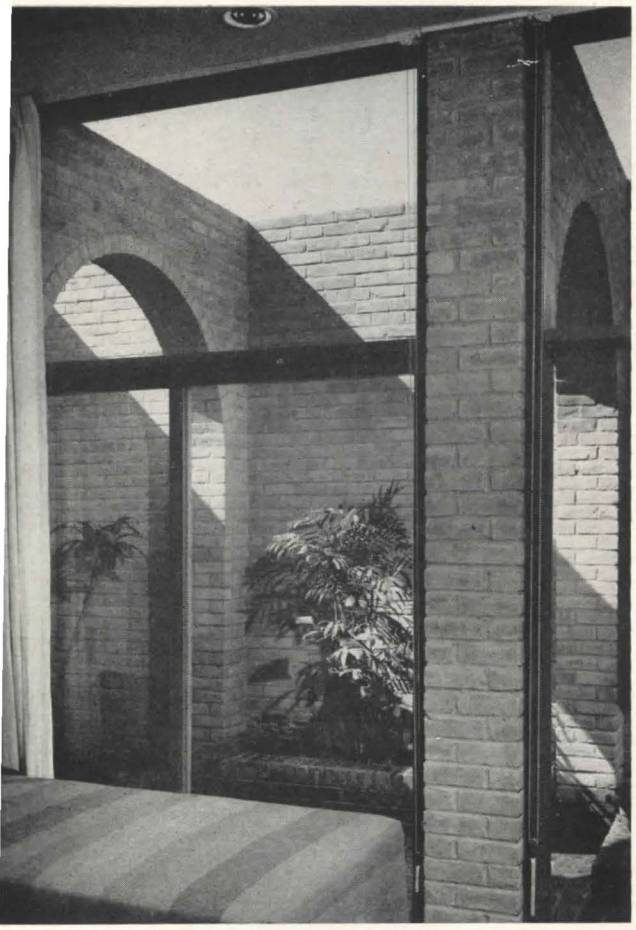
Behind the 12-foot-high paneled doors at t entrance of the Bolton house lies a series rooms with a startling sense of spaciousne —a quality which is unfortunately not ad quately conveyed by the photographs. T owners state that: "People are continual amazed that we have four bedrooms and fo baths, each with its own patio view in th limited space, but the living area of our hou has been considerably increased by the ga den courts. We have small bedrooms and th is the way we like to live—with a minimu of furniture and maximum use of organiz dressing room storage. Our favorite place the library with its walls of books and glas one way we look out on a patio with a fou tain of playing water; the other way, to tropical garden with swaying palms. We li our house and wouldn't change a thing."

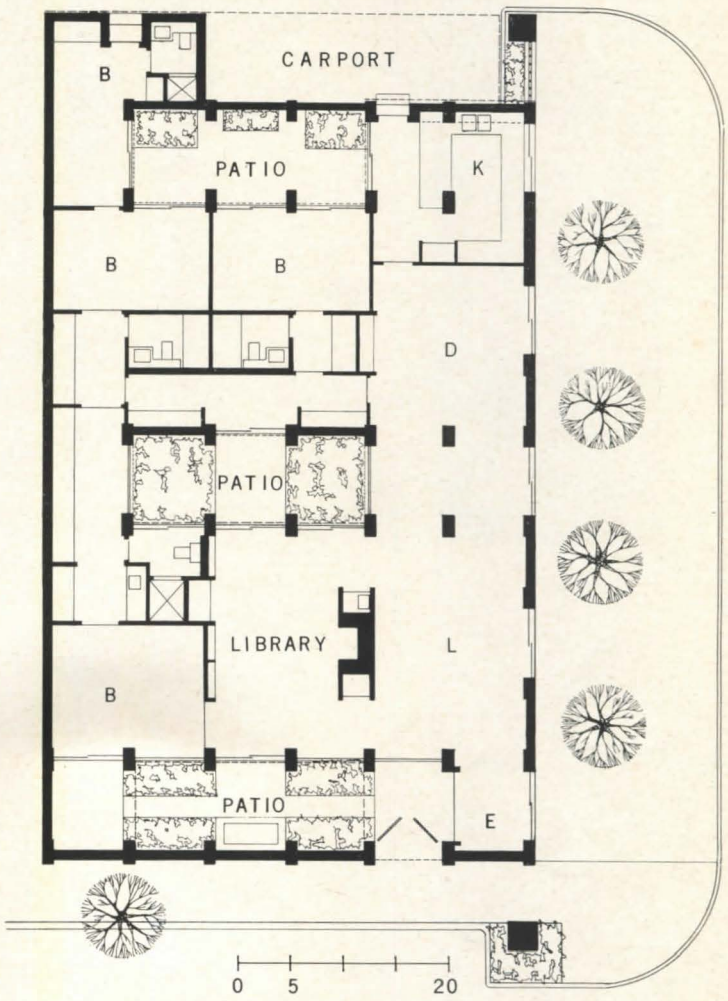
The interior organization of the house also a very conveniently and flexibly a ranged one. For example, the library placed where it may be used with the livi area for entertaining, or with the mast bedroom to form a private apartment. T library and living room are divided by a fir place (*below right*) enclosed in natural finis walnut with white divider strips.

The kitchen is placed for direct service the living-dining area or the rear patio, a adjoins the carport to ease the handling groceries and deliveries. The maid's qua ters at the back also have an entran through the rear patio, which doubles function as a children's play area. T child's bedroom, bath and dressing roo open both from the maid's room and t master bedroom corridor to afford survei lance. The fourth bedroom, bath and dres ing room, forms a guest suite. Along the si of the house flanking the public street, are series of arched windows, shielded by walnu shutters to allow complete privacy or ope ness, as one desires.

The structure of the house is wood fram on a concrete slab, with exterior walls champaign colored Mexican brick and co crete block.

Interior walls are white-painted wall boar brick and walnut paneling; floors are dar oak with borders of white tile. The cost the house was about $45,000, without lot.

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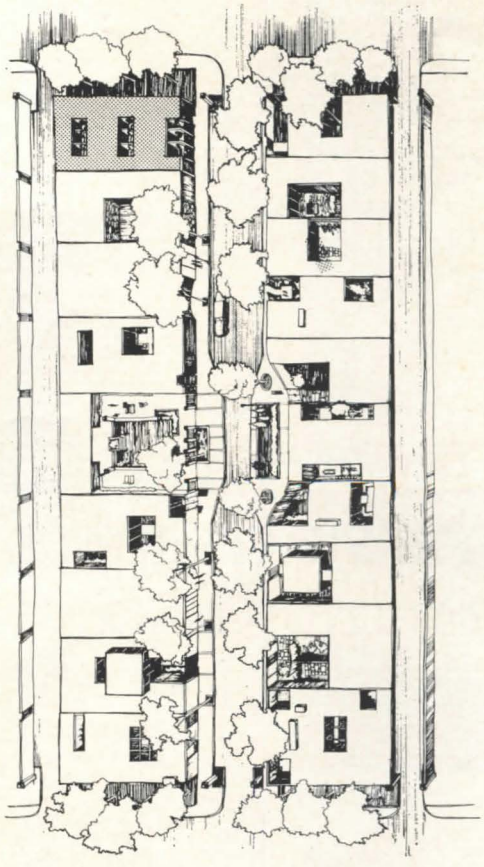
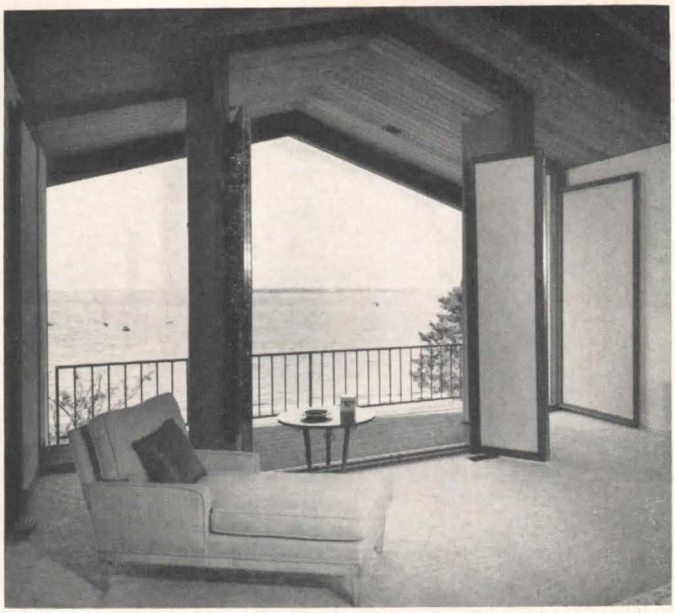




A HOME THAT COMBINES A FRESH APPROACH TO TRADITION AND CONTEMPORARY DESIGN

This handsome house is a good example largely traditional materials being used create a contemporary design of warmth a vitality. Familiar items—wood, stone, stuc shingled pitched roofs—are combined with fresh eye and careful attention to detailin

The site is a sloping one flanking Long land Sound, and has a beautiful view acr the water. There was also an existing swi ming pool and bath house on the front, sou east corner of the lot, which had to be relat to the new house. The owners also desired sheltered garden area on one side to contra with the view of the sound on the other.

The architect states that "the chief proble was to build a large house while keeping t feeling of a home, not a public place, and a to give each individual privacy and a varie of views. This was done by breaking down t house into smaller elements, separating fur tions, and keeping appropriate scale."

The plan solves these various problems ve nicely. A two-story element, containing be rooms, playroom, dining room and service, set into the slope, with an entrance at mi level. The living room and study is detach from the rest of the house, forming a sort family and entertainment center, and co nected to the entrance by a glass corridor. stone garage is placed at the front of the si by a motor court. The entrance approach the house from the parking area is throu a covered (and skylighted) entrance betwe the garage and service entrance, where o has a vista of the garden. A covered walk alo the garden then brings one to the glass e trance link, and the view of the water.

CHITECT: GEORGE NEMENY

dence for Marshall Safir

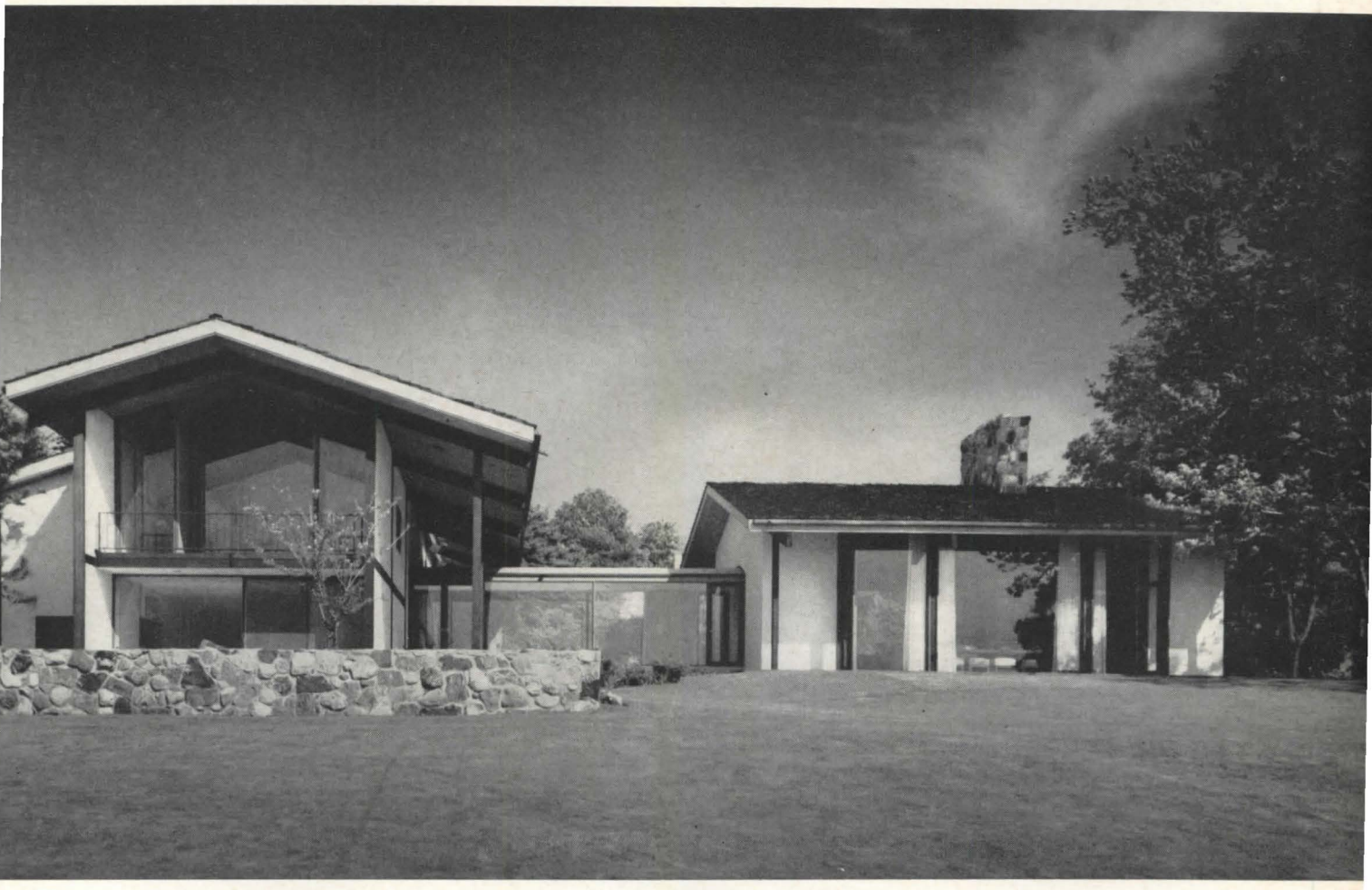
gs Point, Long Island

INEER: *Edward S. Klausner*

TING CONSULTANT: *Edward Simpson*

DSCAPE ARCHITECT: *J. J. Levison*

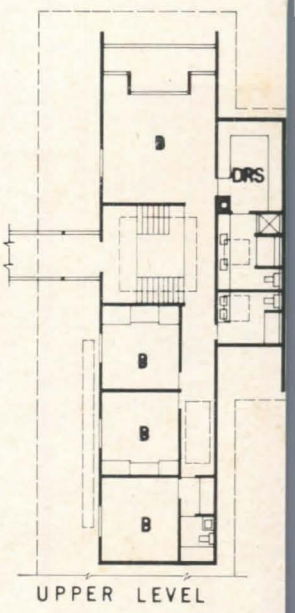
ERIOR FURNISHINGS: *Evelyn Jablow*

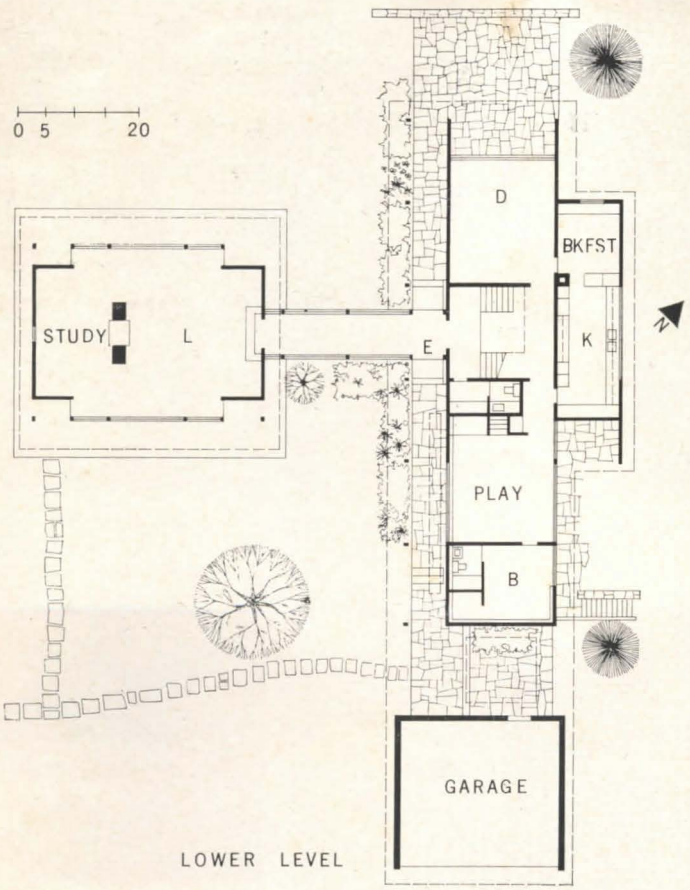


S © EZRA STOLLER ASSOCIATES PHOTOS

PLAN ORGANIZATION ZONES ACTIVITIES

MARIS © EZRA STOLLER ASSOCIATES PHOTOS





The Safir house plan neatly segregates all the various functions for daily life and entertaining, while keeping a very good relationship among the different elements. The living room and study, as noted before, are isolated in a separate unit for quiet concentration or for parties. The major part of the lower floor of the two-story part of the house is devoted to the dining room and a play room, separated by a spacious stair hall. These rooms are arranged so they can be used with the living pavilion for really big gatherings. The kitchen and service areas are placed to open directly into both dining and play rooms, and (via the glass corridor) to the living room.

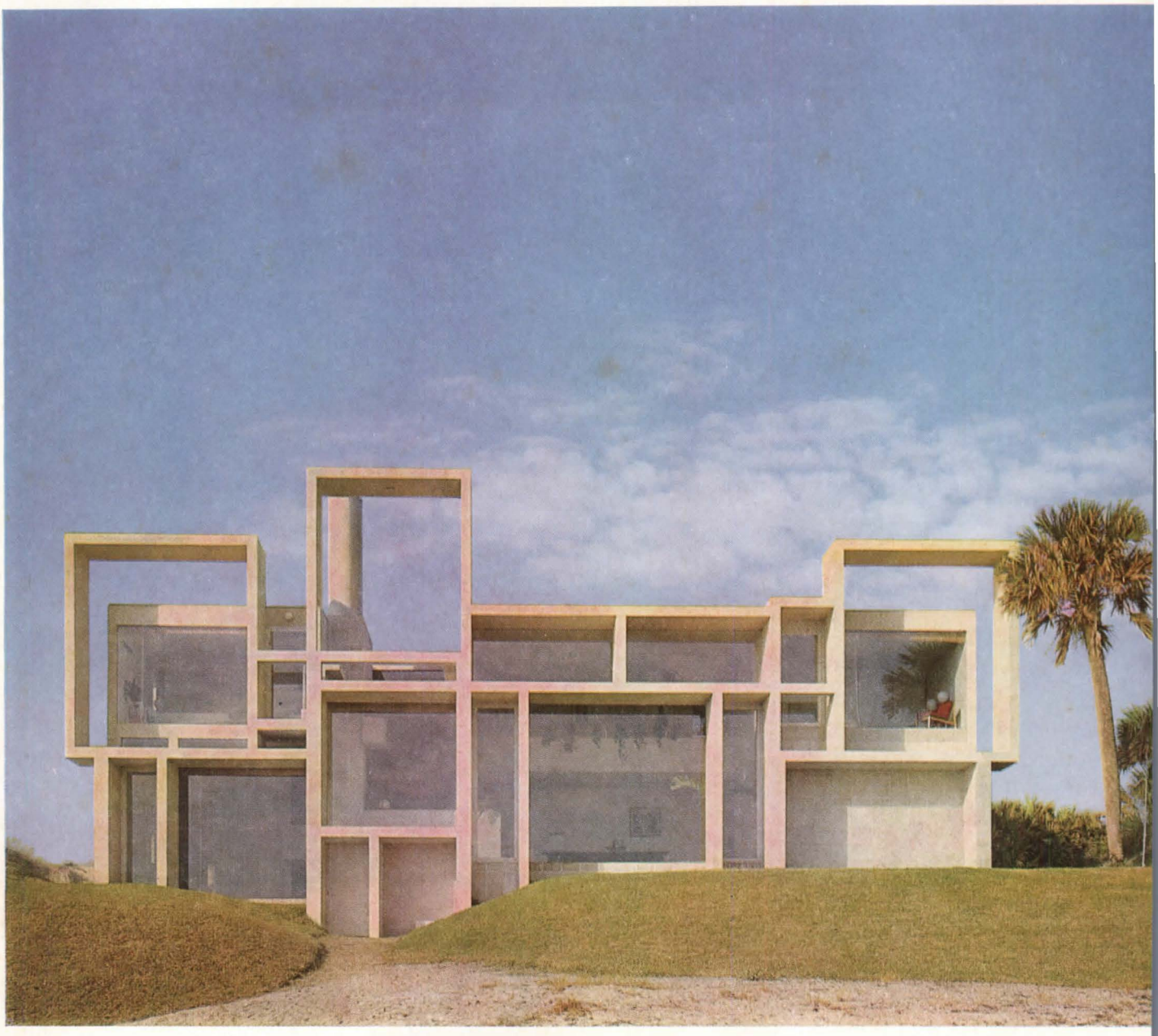
Upstairs, the stair hall separates the master bedroom suite from those for the children, which are directly above the playroom. Most of the baths, and the master dressing room are in a "service block" over the kitchen. The service entry is by an inconspicuous stair by the ground floor maid's room.

The living room, which has glass walls opening on both the garden and ocean sides, has a slate floor extending outdoors to form a surrounding terrace which is partially protected by the wide roof overhang. The entrance walk also doubles as a covered terrace along the play room. A play yard, in view of the kitchen, is on the opposite side of the house.

The structure of the house is wood frame on a concrete block foundation. Exterior walls are stone and painted stucco, and the roof is of hand split shingles. The interiors have walls and ceilings of painted plaster, except for the living room ceiling of cypress, and acoustical plaster for sound conditioning in the kitchen. Floors in the living areas are slate; quarry tile is used in the kitchen, ceramic tile in the baths, and travertine in the playroom. Below grade, floors are asphalt tile. This area (under the two-story unit) contains a heater room, laundry room, dark room, workshop and storage room.

For variety and privacy, some of the interior rooms and baths are daylighted by glare-resistant skylights, and a large skylight is placed over the stairs for dramatic emphasis in this big room.

JOSEPH W. MOLITOR PHOTOS



A SCULPTURED HOUSE OF CONCRETE BLOCK

ARCHITECT: PAUL RUDOLPH

SUPERVISING ARCHITECT: *Robert Ernest*

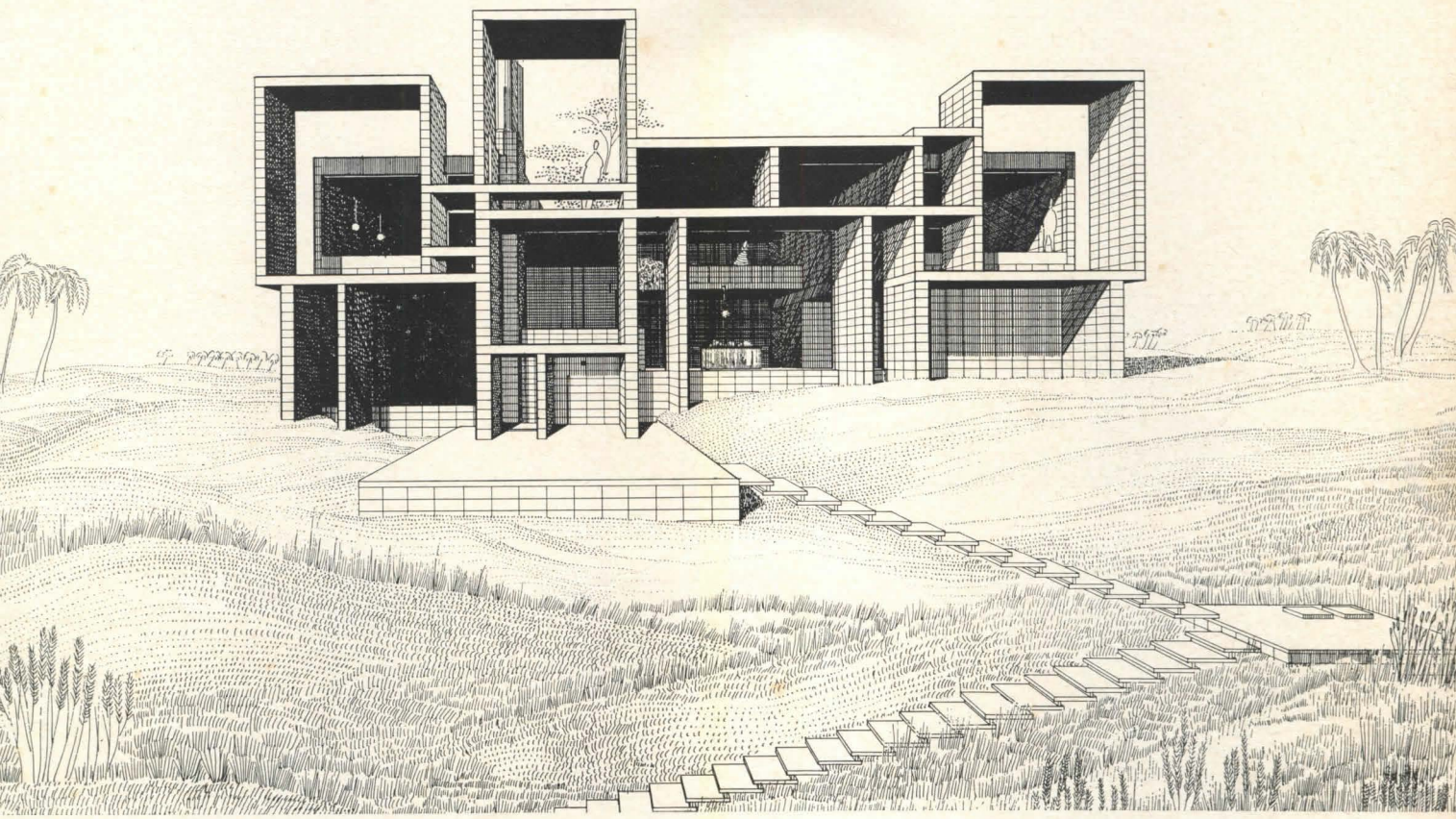
Residence for Mr. and Mrs. Arthur W. Milam

St. John's County, Florida

STRUCTURAL ENGINEER: *Herman Spiegel*

MECHANICAL ENGINEERS: *Frank B. Wilder & Associat*

CONTRACTOR: *William E. Arnold Company*



One of the most uniquely different designs among this year's Record Houses, is this one with its very sculptural use of concrete block. The exterior of the house is dominated by the powerful composition of rectangles forming a sunshade across the rear facade (shown above in the original sketch and completed structure). The spirit of this wall is continued on to the interior of the house, where the floors are arranged on seven different levels.

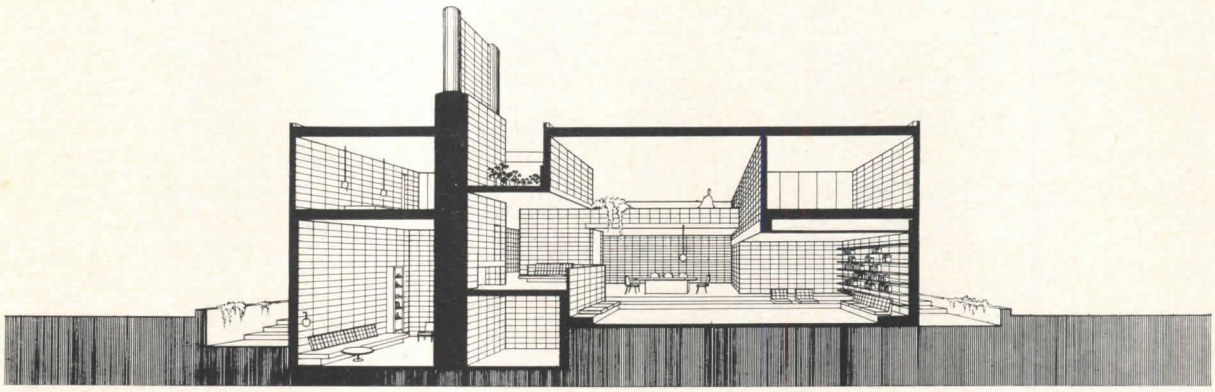
Comments of the owners, after having lived in the house for some time, are worth noting: "We knew enough of Mr. Rudolph's previous works to know that the end result would correspond to our ideas of beauty . . . (and) our faith in the architect was well placed. We are extremely fond of the house. Externally, it is a beautiful piece of sculpture—blending graciously with the sea and the sand surrounding it. It is very comforting inside . . . different ceiling heights, different views, different floor levels make it always interesting, always varied."

The house is a very spacious and conveniently arranged one. All the living areas are essentially one room, with areas for dining, sitting by the fireplace, and the like, created principally by changes in the floor levels. The hallway linking the upstairs bedrooms is treated as a balcony, and adds yet another level to this varied space. As a counterfoil, colors and other decoration are subdued.

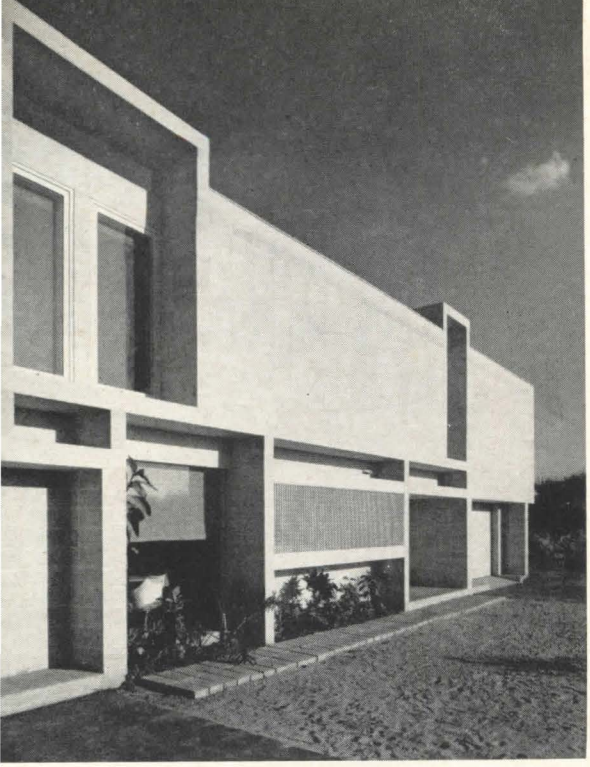
As can be noted in these photos of the Milam house, the already big living areas are made to appear even larger and more open by using very few pieces of portable furniture. In fact, about the only ones are the dining table and its seats. Basic seating for conversation and lounging is formed by cushioned units supported by one of the floor levels.

The house is constructed of sand colored concrete block, left exposed inside and out. The main floor is terrazzo, and the second floors are hardwood or carpet except for tile in the bathrooms. Ceilings are acoustical plaster for noise absorbtion in the big areas. The small windows in the baths are supplemented for daylighting by plastic skylights. One of the baths also has an outside exit and stair to serve as a dressing area for swimmers from the beach. Bedroom closets are provided in the nooks near each entrance.

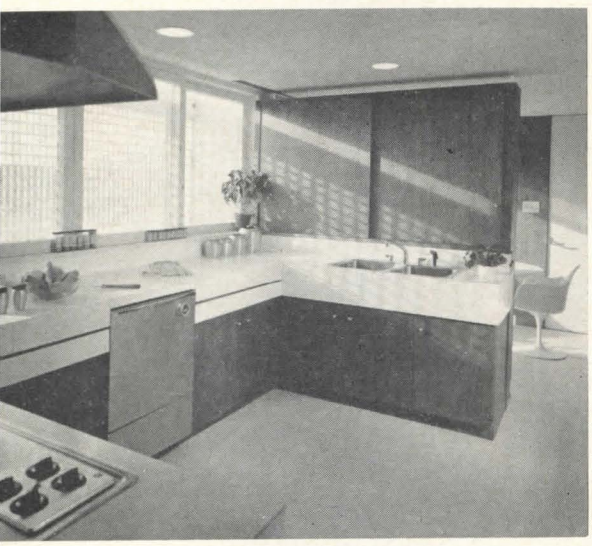
The kitchen (*center right*) is conveniently placed for access to the living and dining areas (via a pass through), to the garage for unloading groceries, and to the front door. The entire house is air conditioned. The cost of the house itself was about $88,074.

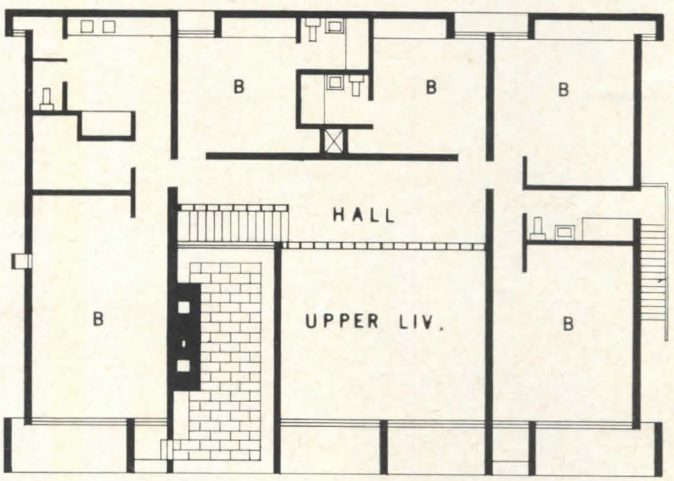


JOSEPH W. MOLITOR PHOTOS

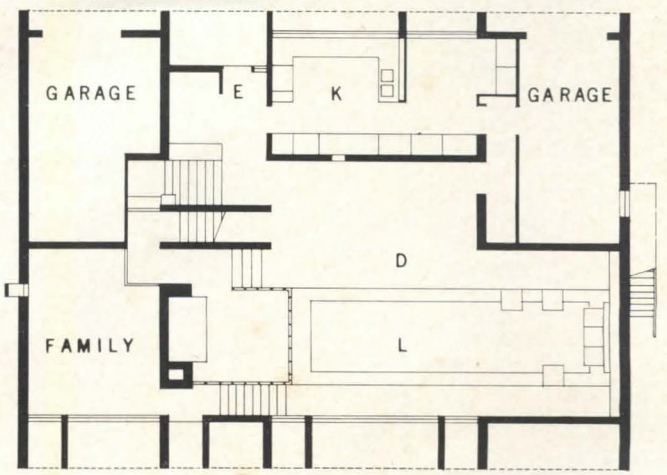


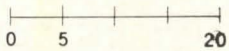
BUILT-INS AND THE MANY LEVELS
MINIMIZE NEED FOR FURNITURE



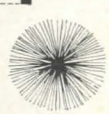


SECOND FLOOR

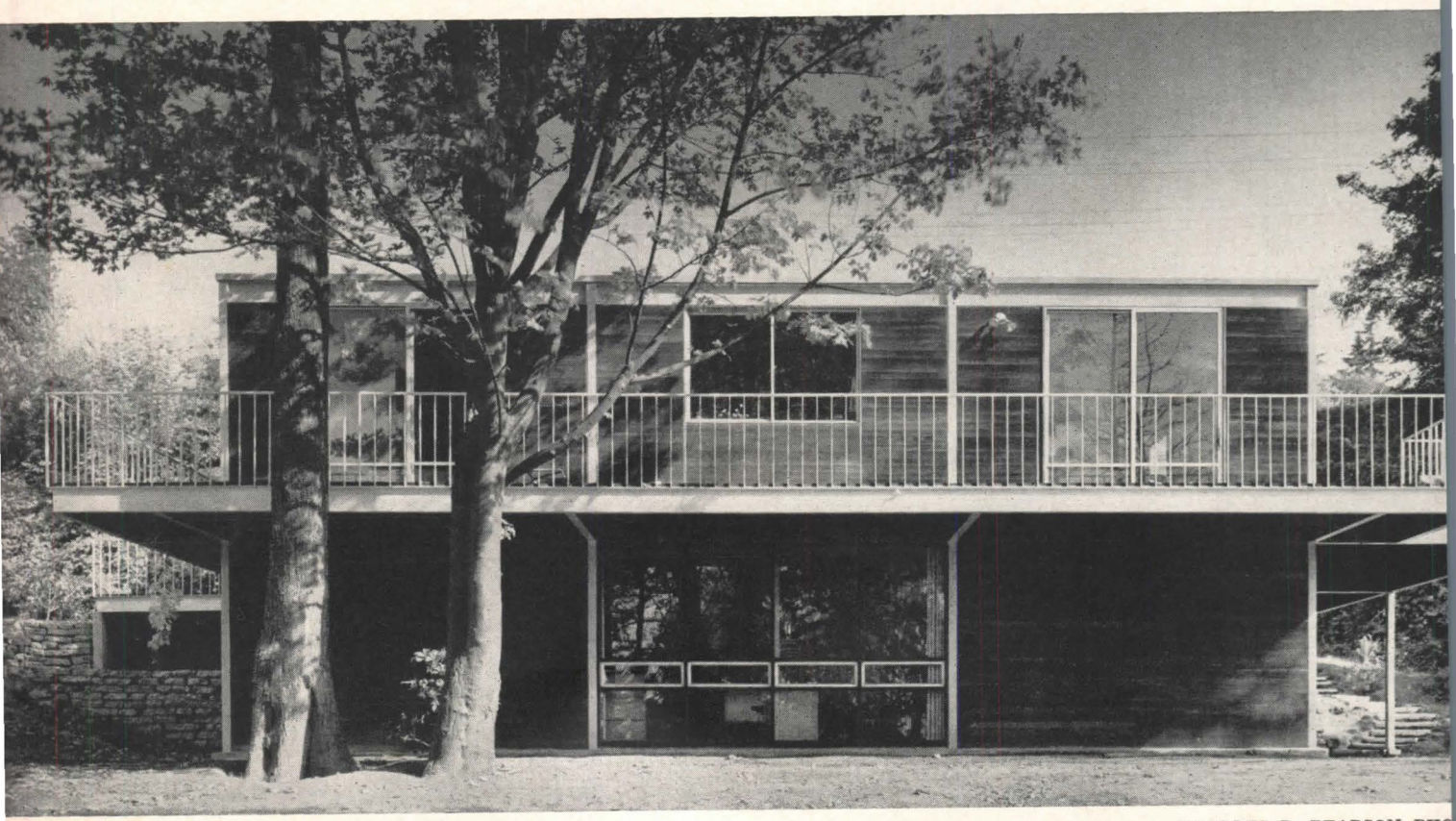




FIRST FLOOR



A TWO-STORY COUR
FORMS HUB OF HOUS
FOR A LARGE FAMIL



CHARLES R. PEARSON PHO

ARCHITECTS: IBSEN A. NELSEN, RUSSELL B. SABIN, GORDON B. VAR

Residence for Mr. Benjamin E. W

Seattle, Washing

STRUCTURAL ENGINEERS: *Gray & Eu*

CONTRACTOR: *Eberharter & Go*

'his neat, compact steel-framed house uses ome very interesting planning devices to ac- ommodate a family with six children. Within s cube shape are seven bedrooms, two large ving rooms, a big multi-purpose play court, dining room, a workshop, a kitchen, a study rea, three baths and a utility room for laun- ry and sewing.

All the rooms are arranged around a cen- ral clerestoryed "court," which virtually liminates hallways in the house. It serves for irculation to all rooms on the lower level, and oubles as a large indoor play area for the hildren. A space-saving spiral stair leads to he balconies and living areas on the upper oor.

Except for the master bedroom and bath, he rooms on the upper floor are extremely pen in plan, and, together with the court, ive a great air of spaciousness. One of the iving areas is more formal and for the adults; he second one is treated more as a family oom for the children. Eventually, shojii creens will be installed to separate the adult oom from the court.

The house is framed in steel, expressed di- ectly and simply, and painted white for ac- ent. Wood was used for filler panels wherever ossible to "soften the effect and render it nore human." The end result is a very trim nd unified structure.

The site is a pleasantly wooded, sloping one. Jse was made of the slope to create a main ntrance opening into the adult areas of the pper level. A balcony surrounds three- uarters of the top floor to add outdoor sitting nd entertaining space, and to give sheltered lay areas around the lower level of the house. These areas will be supplemented later by a errace and swimming pool. Thus, indoors and ut, there is a variety of places for the fam- ly's friends of different ages to gather for heir respective activities. A galley-type itchen was placed for easy service to either f the two upstairs living areas, the dining rea and the surrounding decks.

Ample storage is provided for all the mem- ers of the family. Each bedroom has one wall anked with closets, and a wall of adjustable ookshelves. There are also banks of built-in torage units in living areas and a carport.

A STEEL POST AND BEAM FRAM
PERMITS OPEN INTERIOR SPACE

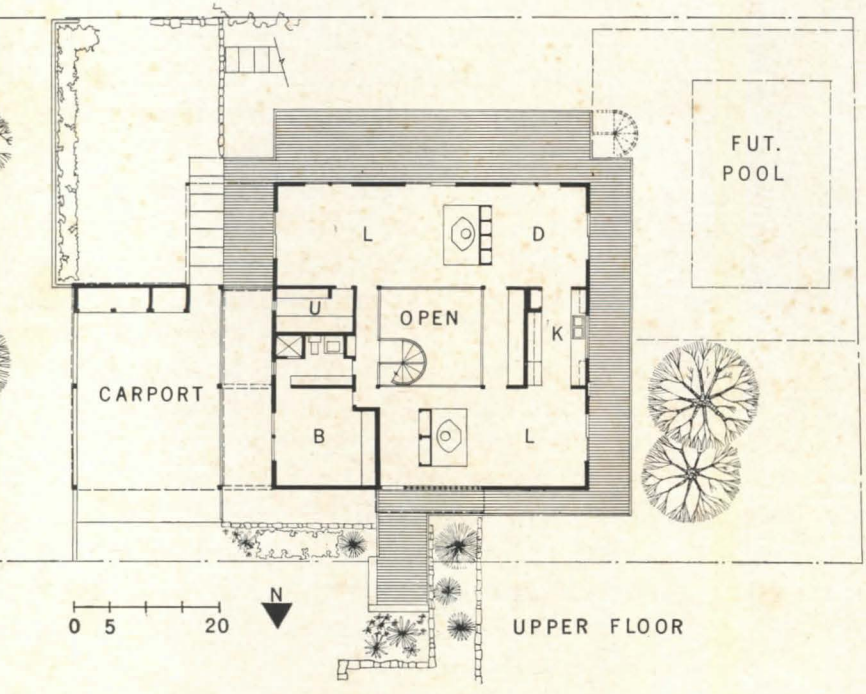
An extremely light, tidy appearance is give to the Weeks house by the white-painted ste frame. The contrasting exterior walls are stained cedar tongue-and-groove siding. Th flat roof is built-up.

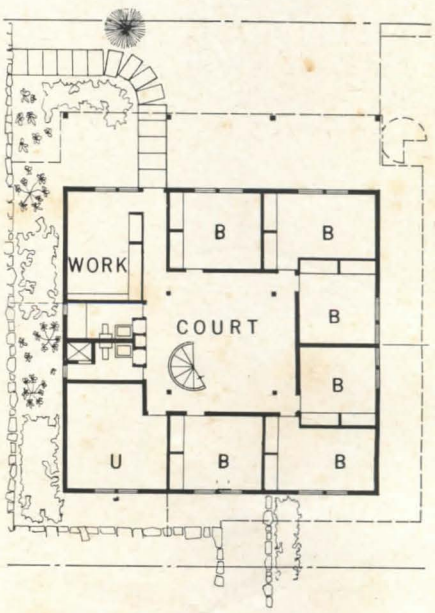
Interior walls are gypsum board finishe with stipple enamel, except for the walls i the bathrooms, which are ceramic tile. A floors are plastic tile, and living areas ar covered with matting. Ceilings are one-by two cedar strips. Aluminum sash is used fo windows throughout the house. The mai entrance door is vertical-groove Douglas fi while all the others are mahogany. The doo on the banks of closets are folding and lou vered. Glass fiber blankets are used for bot acoustical and thermal insulation. The hea ing system uses a gas-fired furnace, wit thermostat controls. All bathrooms and th kitchen have exhaust fans.

Among the items of special equipment i the house is a built-in Hi-Fi system, house in the storage wall on the court side of th kitchen partition. This wall also houses large food freezer unit. A washer and a drye are in the downstairs utility room.

The approximate cost of the house, ex cluding lot, landscaping, and interior furnish ings was $39,000.

CHARLES R. PEARSON PHOTOS





SOARING LAMINATED ARCHES CREATE DRAMATIC INTERIORS FOR A HILLTOP HOUSE

MARC NEUHOF PHOTOS

ARCHITECT: JULES GREGORY

Residence for Mr. and Mrs. John E. Gombos

Verona, New Jersey

ENGINEERS: *Bliss & Hanle*

CONTRACTOR: *Phillip Leone*

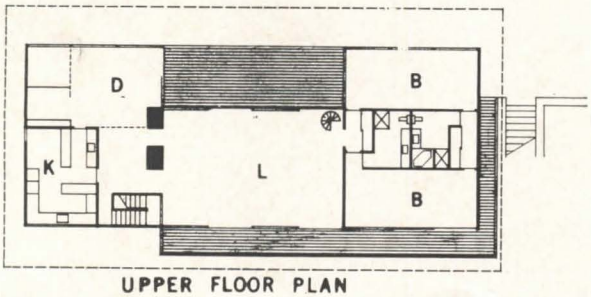
Some truly exciting and dramatic spaces are created in this large house by its roof of laminated arches and solid, curved wood decks. Although roofs of this type have often been seen in religious and other structures, it is a fairly unique application for a residence. Its effect is heightened by the peak skylight.

The house is built on the highest point of land in Montclair, New Jersey, and provides views of New York from the Statue of Liberty to the George Washington Bridge. An ancient four-story Victorian house was demolished to provide site and foundation for the new structure. The size of the house was thus limited by these existing stone foundations.

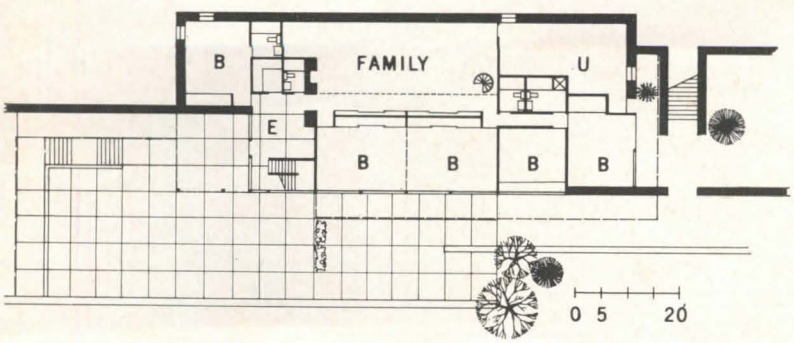
The upper level of the house is devoted to the parents use, with living room, dining room, bedroom, bath and dressing room, and kitchen. The lower floor is for use of the children, with bedrooms, bath, recreation rooms and servants' quarters.

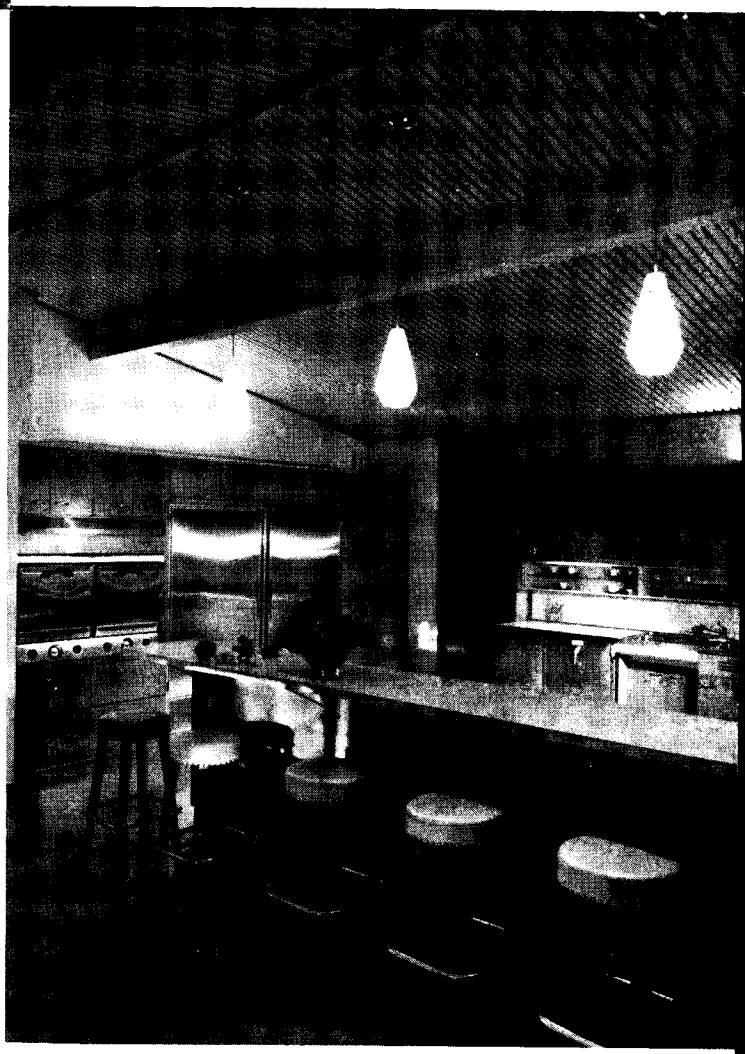

BIRDS

A VARIETY OF SPACES ARE CREATED UNDER THE BIG DOMINANT ROOF



UPPER FLOOR PLAN



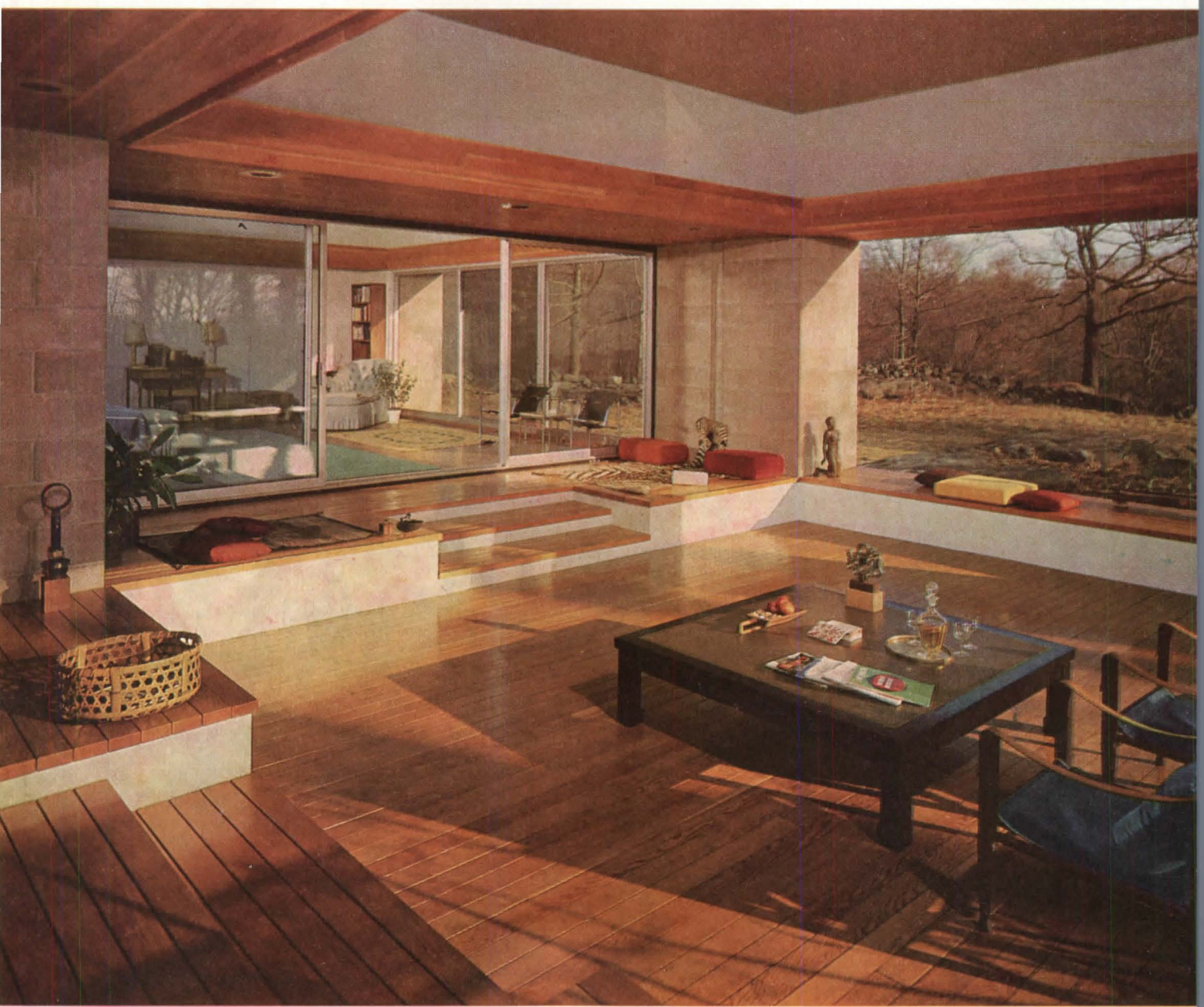


One of the many nice features of the Hoehn house is the laminated roof, exposed as the finished ceiling in the interiors. It is composed of 2- by 6-inch and 1- by 4-inch boards, with ¾-inch wood dowel spacers. On the exterior the roof presents a very attractive dentilated edge.

The same care was carried through all parts of the construction and finishing. The basic structure is an exposed pattern of wood posts and beams with filler panels of glass, red cedar and tile; this rests on a base of brick-veneered concrete walls.

The interiors are walled with painted plaster and stained wood paneling, except for ceramic walls and floors in the baths. Other floors are finished in carpet, travertine or walnut, and slate in the downstairs playroom. This room also has a suspended acoustical plaster ceiling for sound control. All windows and glass doors are double-glazed. The sliding units have aluminum sash, while the fixed ones are framed in wood. Aluminum sliding screens are provided for all units that open. The entrance and all interior doors are flush wood.

The house is year-round air conditioned, supplemented by exhaust fans in the spacious kitchen and in all bathrooms.



ARCHITECTS: ULRICH FRANZEN & ASSOCIATES

ASSOCIATE ON JOB: *Sam Nylen*

Residence for Mrs. Virginia Hubbard

Greenwich, Connecticut

CONSULTING ENGINEER: *Vladimir Busch*

CONTRACTOR: *Emil Toikka*

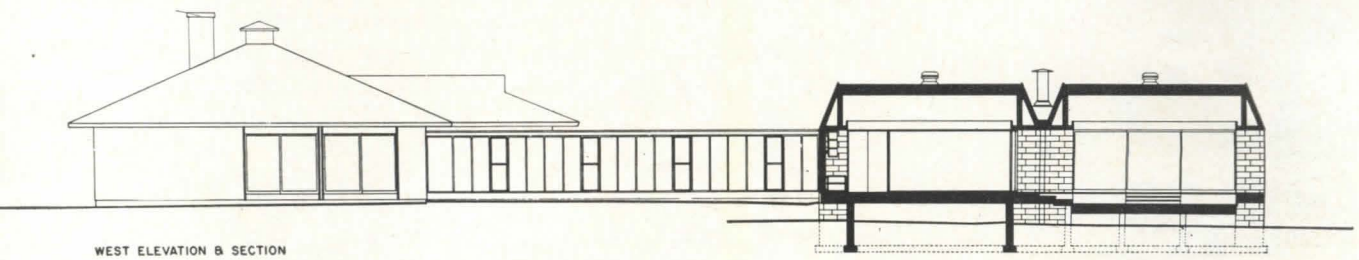
DDITION FITS COTTAGE FOR A NEW WAY OF LIFE

This extremely interesting and sophisticated house had its origin in the needs of a family whose children had reached college age. With the children away a good part of the time, their original house was too big, while another one on the property was inadequate.

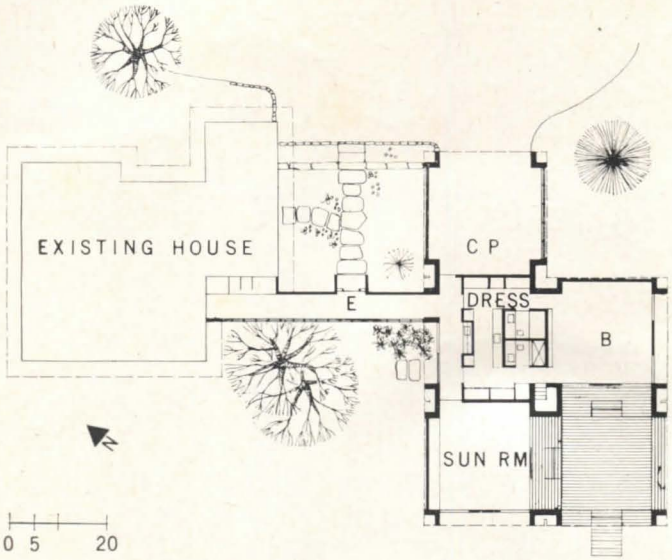
The architect states that: "a run-down cottage on a spectacular site was to be remodeled for a 'one-level life,' and the larger house on the same grounds was sold. The remodeling program called for a sitting room, a bedroom, a terrace and a carport. It quickly became evident that substantial changes in the existing cottage would cost more than new construction. This scheme groups the new construction into a cluster of units tied to the cottage by a new entrance hall."

The old cottage was merely simplified and freshened up, and a bi-nuclear, contemporary house is the result. The new wing is essentially for quiet and adult use, while the original part serves the active needs of a family and their grown children.

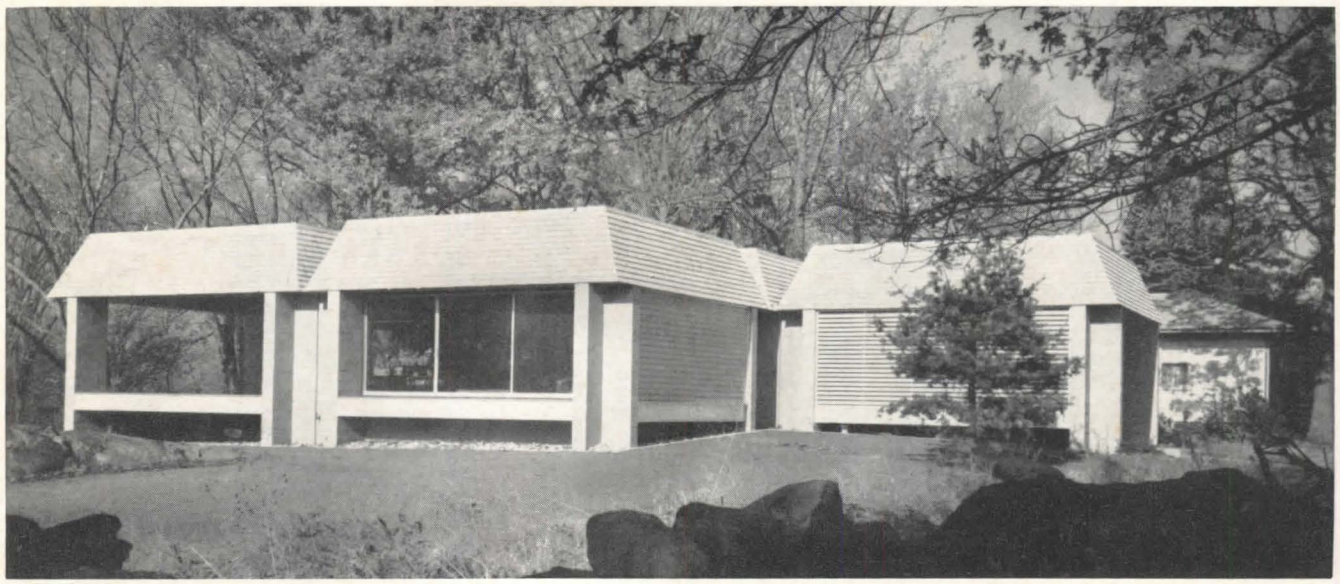
Though totally different in design, the old and new sections were given unity by use of the same materials: gray clapboard siding and sloping shingle roofs. But here the similarity ends, and the new wing becomes the dominant and arresting focal point of the house compound (see photos on the next page). Each new room, including the open terrace (shown here, and in color on the cover), is roofed by a truncated hood on concrete piers.



WEST ELEVATION & SECTION



CLUSTERED UNITS OF NEW WING GIVE ROOM INDIVIDUALITY



As can be noted in the plan, the hall linking the old and new wings of the Hubbard house also creates a very pleasant entrance court. The front side of the hall is closed-in and forms a gallery for the display of paintings. The opposite side as seen in the photo (*left*) is all glass, and overlooks the pleasant stream shown in the photo (*right*).

The new rooms are generous in size, but seem even larger because of the wide expanses of sliding glass sash. When open these can be protected by glass fiber screens. A strong horizontal return at the lower roof line gives a pleasant unity to all the openings, whether they are glazed or not.

The interiors have painted gypsum board walls and red oak floors; baths are surfaced with unglazed ceramic tile. Ceilings are gypsum board and Douglas fir boards. Heating is by a warm air, down flow furnace, with ducts sized for future air conditioning.

A SIMPLE, WELL-DESIGNED HOUSE FOR $15,867

ALEXANDER GEORGES PHOTOS

ARCHITECT: WILLIAM MORGAN

Residence for Mr. & Mrs. Alvin D. James

Atlantic Beach, Florida

CONSULTING STRUCTURAL ENGINEER: *H. W. Keister*

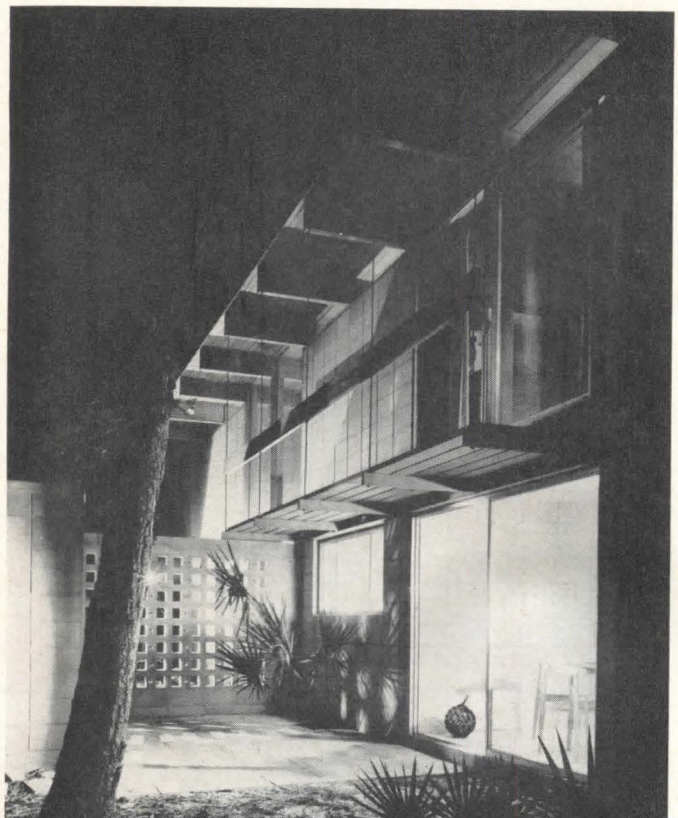
CONTRACTOR: *Charles J. Pyatt*

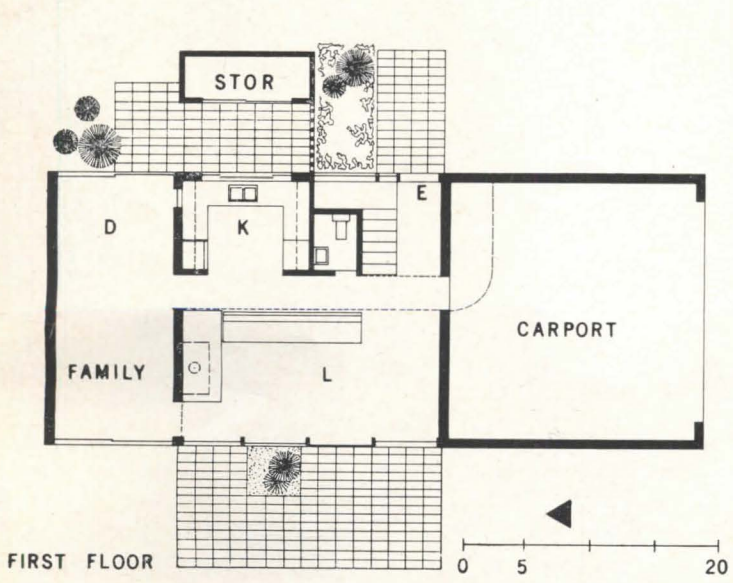
This trim house is excellent proof that a well designed, livable home for a family of five can be built for a reasonable budget. The owners, who have three girls (ages 8, 5 and 2), desired a house in which they could entertain frequently and informally, and which had a separate children's activity area that would not have to be tidied up when unexpected guests drop in.

To fulfill these requirements, the architect created a very effective two-story entrance and living area, flanked by a separate but connected family and dining room. A third living space is provided by a balcony sitting area. These rooms have a sense of spaciousness unusual in a small house. Changes in ceiling heights, glass walls opening on little terraces and simplicity all contribute to this effect. The cost was kept down by use of a compact, rectangualr plan, and simple materials.

LOW CEILINGS IN SUBSIDIARY ROOMS DRAMATIZE TWO-STORY LIVING AREA

ALEXANDER GEORGES PHOTOS





The James house is built on a lot with a lit pine grove, and located about 200 yards fr the Atlantic Ocean. Setbacks on all sides the site limited the building area to 22 52 feet. The house was carefully placed, a the trees were protected during constructi to maintain the natural landscaping. Priva from neighbors close by on the north is a sured by a blank wall on that side.

The high central space in the house is ma to appear even larger by contrasting it wi low ceiling heights (7 feet 4 inches) in t other rooms on the first floor. The openne of the high space is preserved by use of open staircase, and a "bridge" to connect t master bedroom and children's bedrooms the second floor. A delicate wood latti shields the upper glass wall of the living roo from sun and glare. Except for high gla strips between the roof beams and narr ventilating windows, the children's bedroor are enclosed by unbroken walls for quiet a seclusion. The master bedroom has a slidi glass wall opening on a little balcony su pended from the roof by steel rods.

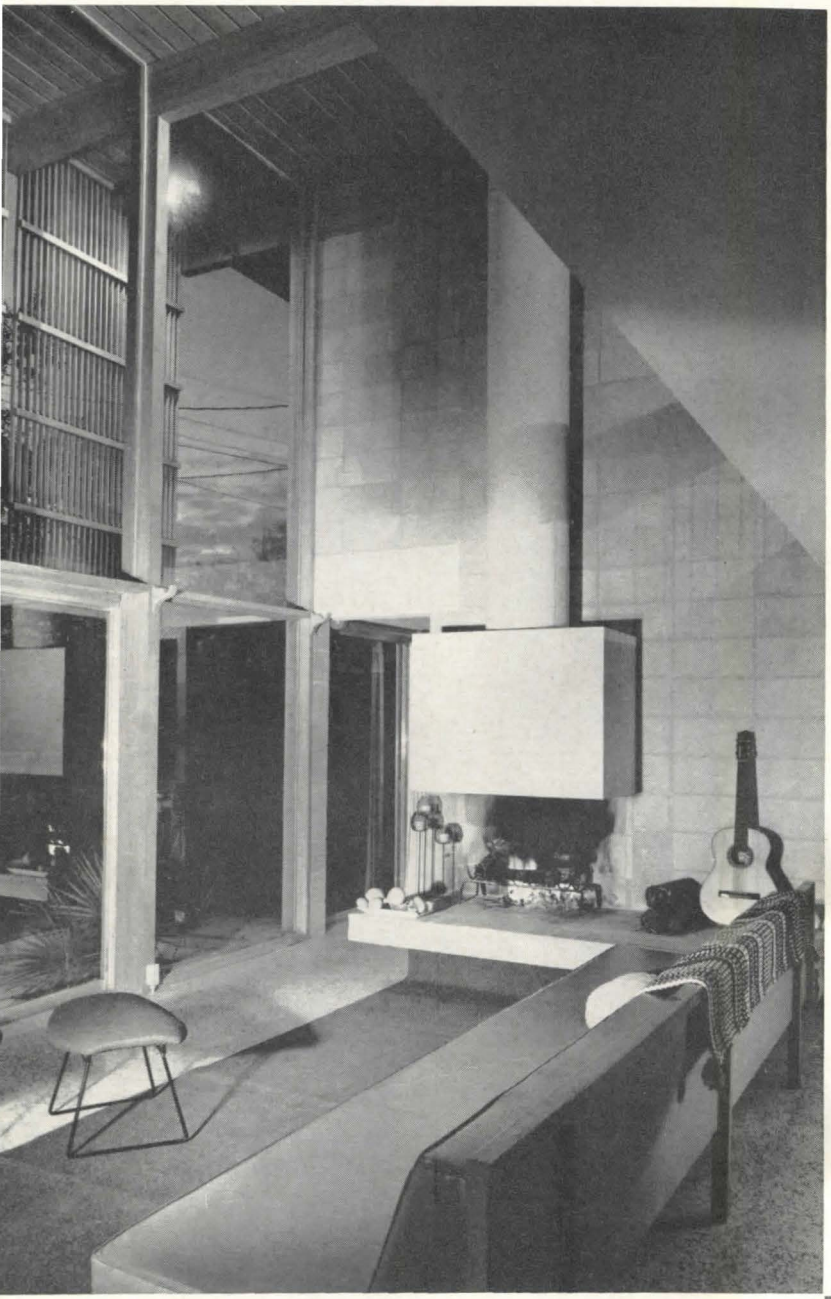
On the main floor, the kitchen is placed a rather unorthodox location, but appears work well for a household with three ch dren. A pass-through connects it with t dining end of the family room. A little di ing terrace is just off these rooms (*left* screened by a fence flanking the entry and little storage house. As can be noted on t plan, the carport is incorporated into t volume of the house, and substantially i creases the apparent size of the building.

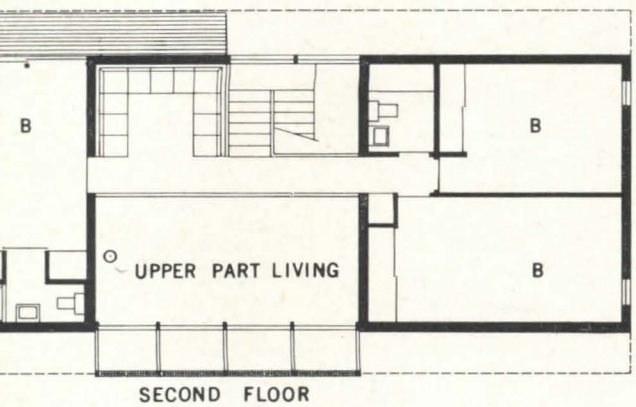
The structure is built with concrete sl on grade, and load-bearing concrete blo walls. Floors on the first level are terrazz The second level has wood joists and floors vinyl tile on plywood. The roof constructi has 4- by 12-inch beams on 5-foot cente spanned by 2-inch tongue and groove wo planks laid flat. These are topped by rig insulation and built-up tar and gravel roofin All non-bearing second floor partitions a drywall panels on wood studs.

The finishes throughout are mostly natur ones. The beige concrete block is coated clear silicone waterproofing, and all expos woodwork is strained driftwood gray. Bat are finished in mosaic tile.

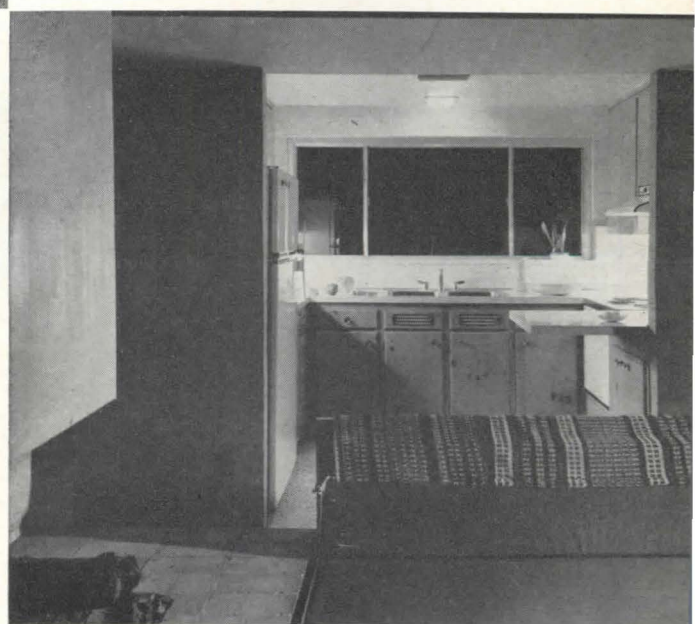
Heating and air conditioning is provid by a horizontal heat pump unit under the ca port ceiling, from which a single duct ru under the balcony bridge to serve all room

The cost was $15,867, excluding lan kitchen appliances and architect's fees. T square foot cost was about $8.62, a barga price for these days.





SECOND FLOOR



HEDRICH-BLESSING PHOTOS

The curving facade of this large, restful hou has been well adapted to accommodate sever restricting site requirements. The lot is fair sized, beautifully wooded one on the sho of Lake Michigan. The owners wished to ha the house set well back from the street f privacy, and to accommodate off-street par ing for guests. A large lawn between the hou and the lake view was also desired. Howeve about half of the property consisted of a abrupt slope down to the lake, leaving a n too large area for the house and lawn. Th was solved nicely by the crescent shape, wi ends turning away from the street to encor pass a central lawn at the back.

For greater privacy, the front of the hou has relatively few openings and mainly co tains service areas. All major rooms open the back to the gallery, lawn and view.

Parking is provided in a circular entran drive; at the center is a "drive-through" g rage, with doors on both sides, and connect to the house by a *porte cochère*. The house black brick with white trim. Windows a fixed glass flanked by louvers, which can adjusted for controlled ventilation free fro drafts. Screens are fitted over these ventil tors, so the view through any glass is uno structed.

ARCHITECTS: GEORGE FRED KECK — WILLIAM KECK

Residence for Milton Hirsch

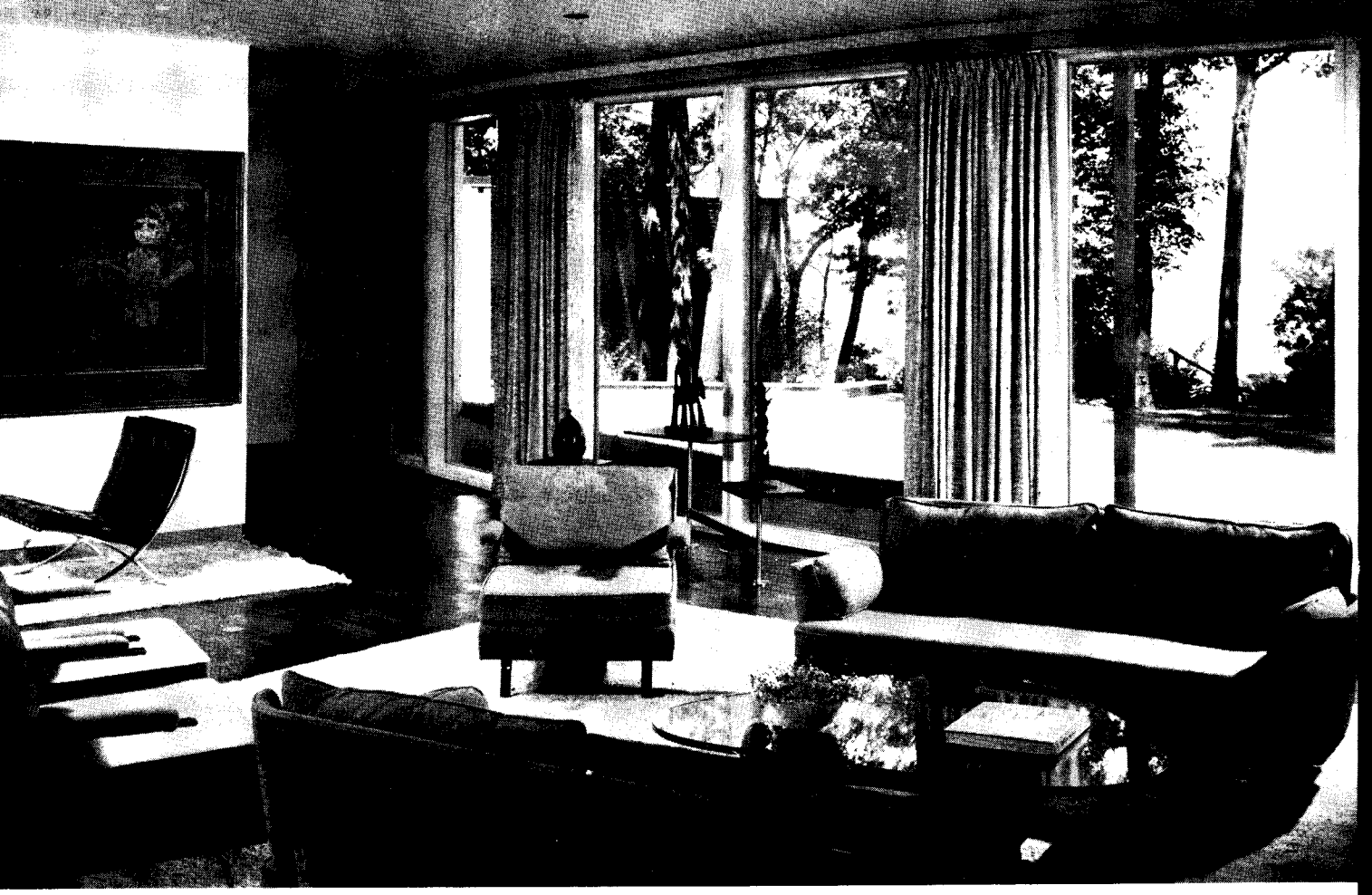
Highland Park, Illinois

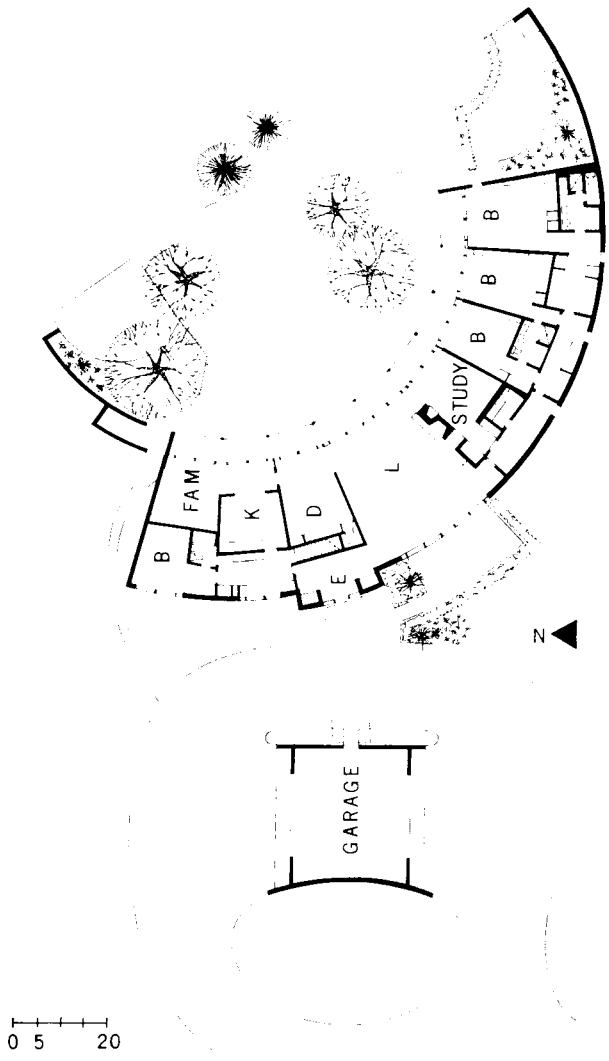
CONTRACTOR: *R. H. Roberts Construction Company*

LANDSCAPE ARCHITECTS: *Atkinson & Fitsgerald*

INTERIOR DESIGNER: *Marianne Willisch*

CRESCENT HOUSE TO ENCOMPASS A LAKE VIEW





The Hirsch house was planned for a somewhat formal way of life, and as a suitable background for a growing collection of paintings and sculpture (only a few items from the collection can be noted in these photos). With this in view, rooms are equipped with recessed picture moldings, recessed directional ceiling lights, and (in the living room) stands and glass cases for sculpture.

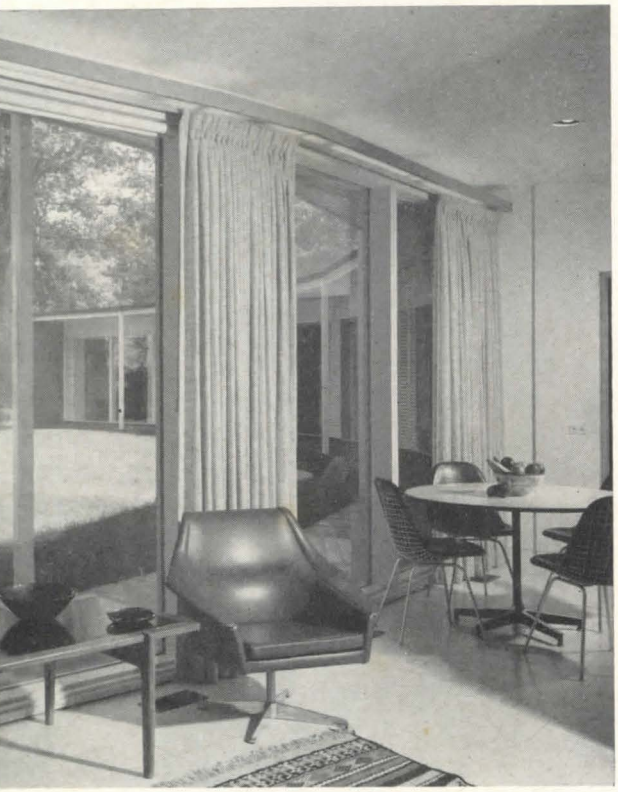
The structure has poured concrete foundations and a partial basement. Exterior walls are brick, with double-glazed windows. The flanking louvers, a typical and handsome detail of the Kecks, are of aluminum and fitted with screens. The house is air conditioned and uses gas-fired hot water heating.

The interior walls are finished with plaster, except for the baths, which are marble and tile. Floors are parquet wood in the living areas, terrazzo in the kitchen, and asphalt tile in the playroom (*top right*). The kitchen ceiling is acoustical tile to reduce noise transmission. Plastic skylights are used to add light to dining room, kitchen and baths.

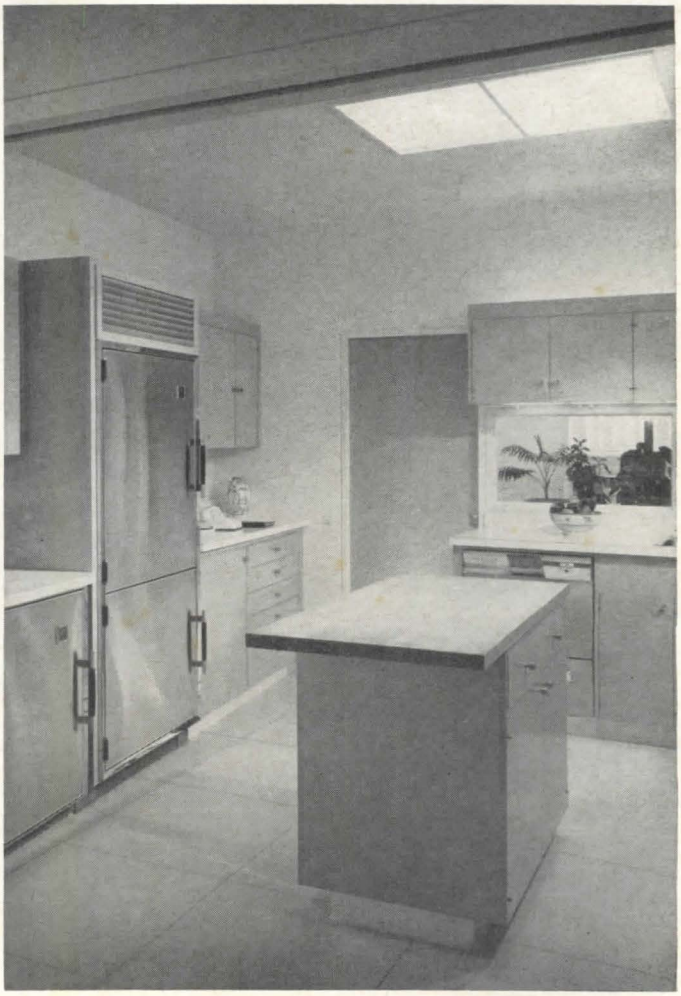
The plan is simply organized, with living-dining areas in the center, flanked by bedrooms to the east, and service areas and playrooms to the west. The playroom has an area for breakfast and informal meals.

Terraces and walks are slate; there is provision for sculpture to be added outside.

HEDRICH-BLESSING PHOTOS



ELEGANT FINISHES AND DETAILS COMPLEMENT OWNERS' ART COLLECTION



When designing his own house, Thomas Lehrecke set himself the dual task of fulfilling the requirements for his family and those of a prototype for a 15-unit development. After careful analysis, these requirements were simplified to three criteria for the design: (1) low cost construction; (2) flexibility and adaptability of the layout; and (3) contemporary architectural design.

This handsome, orderly house succeeds very well on all three counts, and has been handled with a quiet restraint that could well bear repetition. Changes in color and landscaping could give the needed variety in a deve ment. The exterior of this well-detailed pr type relies on natural finishes of redw Douglas fir and concrete block, accented white panels.

The cost of this good size house (two living areas, four bedrooms) was kept $28,000 by a compact design, short plumb and heating duct lines, and standard size simple, conventional materials. With the ception of routing one jamb, materials w cut only in length. This price could be lowe if the house was built in quantity.

BEN SCHNALL PHOTOS

ARCHITECTS: OPPENHEIMER, BRADY AND LEHRECKE

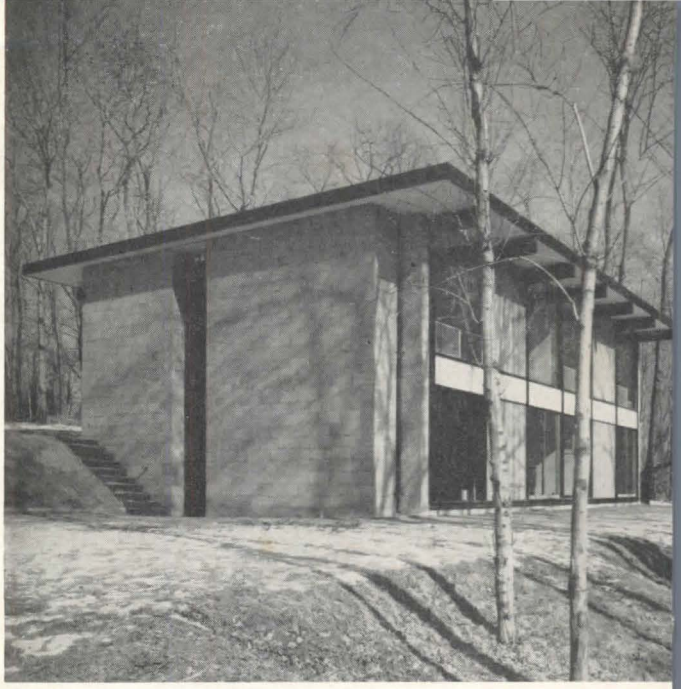
PARTNER IN CHARGE: *Thomas C. Lehrecke*

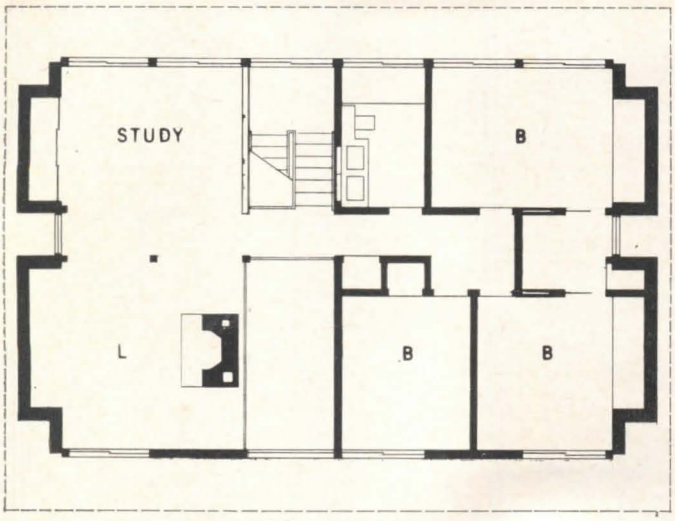
Residence for Mr. and Mrs. Thomas C. Lehrecke

Tappan, New York

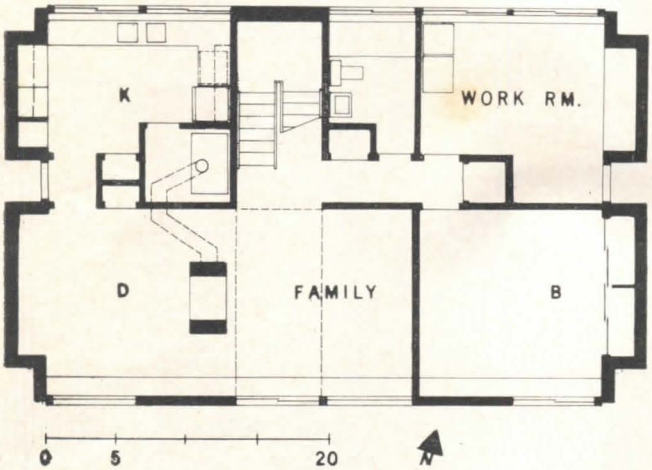
CONTRACTOR: *Voto and Low Construction, Inc.*

ARCHITECT'S HOME IS DEVELOPMENT PROTOTYPE



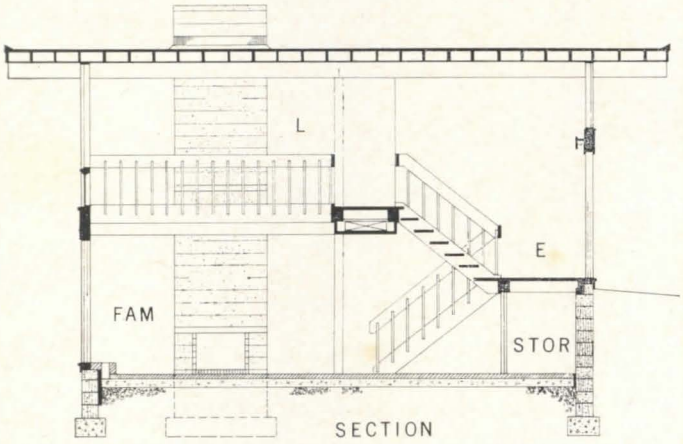


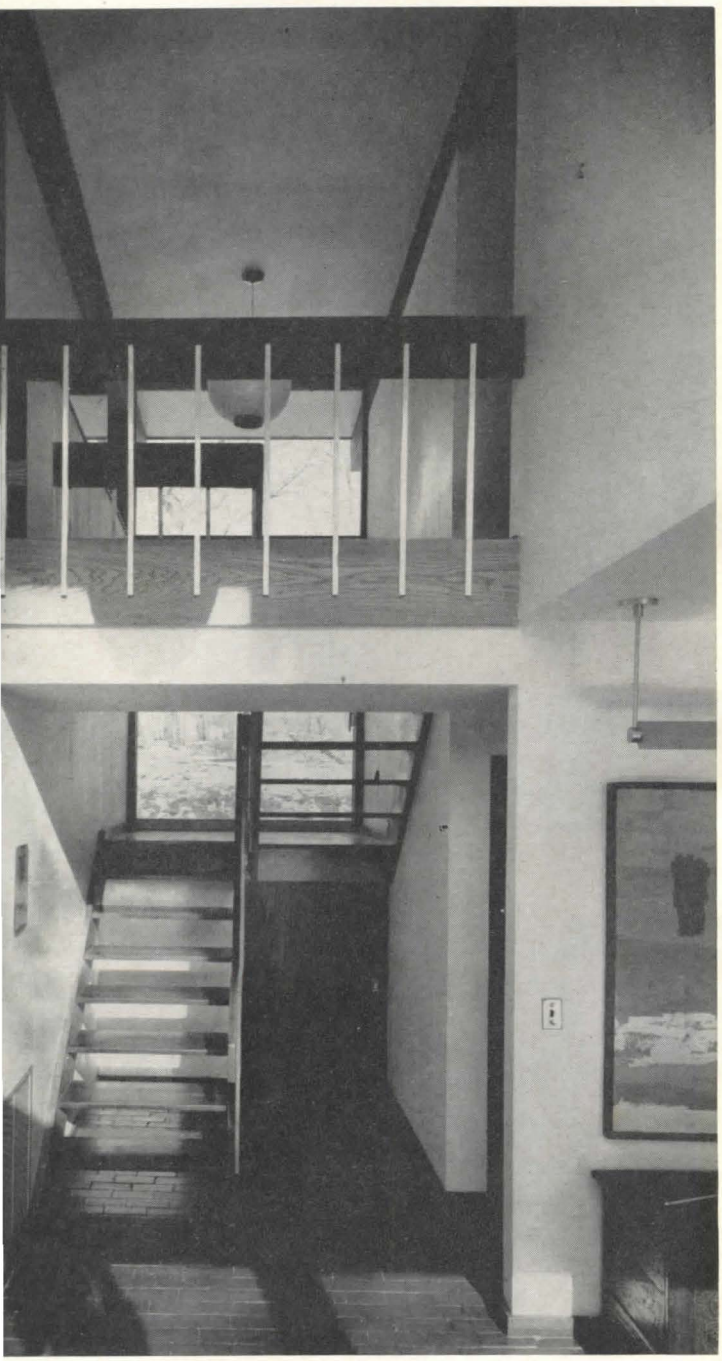
UPPER FLOOR



BEN SCHNALL PHO

A MID-LEVEL ENTRY GIVES EASY ACCESS TO ROOMS ON BOTH FLOORS





The Lehrecke house has more flexibility in its plan than might be remarked at first glance. Post and beam construction, with 14-foot maximum spans, makes all partitions non load-bearing and movable. In the plan developed here, it has also made possible the open plan in the living areas, and permitted the omission of flooring in one bay over the family room, giving a vertical flow of space from the lower to the upper level. This open space also gives a good view of the wooded landscape from the mid-level entry (*left*).

The plan is arranged with childrens' bedrooms in the eastern half of the upper level, and the master bedroom on the lower level for privacy and direct access to a future terrace and swimming pool.

Except for two conventional doors, in the center strips of the sidewalls, providing access to the kitchen and workroom, all openings are sliding aluminum doors with sliding screens. These allow maximum cross ventilation in the summer. Winter heating is by a hot air furnace.

The structure of the house has a concrete foundation, and a frame of Douglas fir. The roof is built-up. All interior walls and ceilings are gypsum wall board, painted. Floors are brick, red oak or tile. The staircase is built of oak, walnut and aluminum.

The architect states that, "the builder confirmed that this kind of house, if constructed in groups of more than 15 at a time, could be built for $25,000 each," a competitive price.

CLASSIC ELEGANCE IN STURDY MATERIAL

ARCHITECT: EDWARD D. DART

Residence in Highland Park, Illinois

ENGINEERS: *Samartano & Robinson*

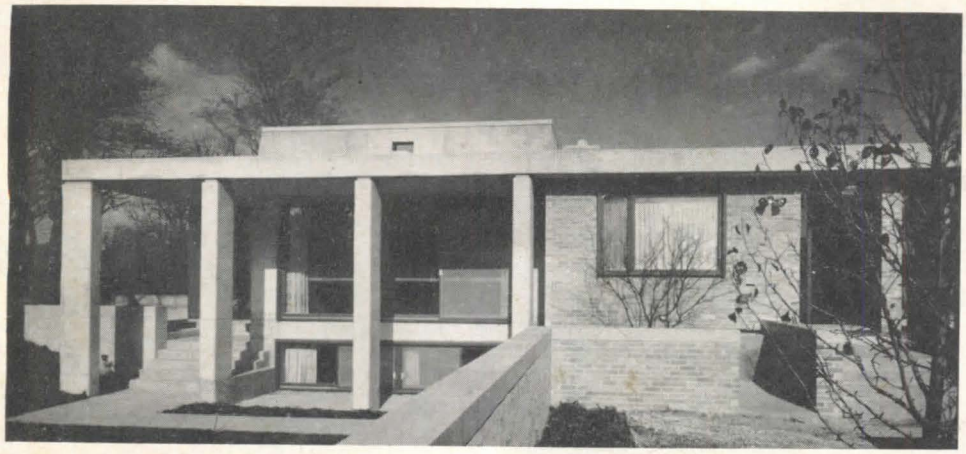
CONTRACTOR: *Pepper Construction Co.*

LANDSCAPE ARCHITECT: *Catherine Cole Church*

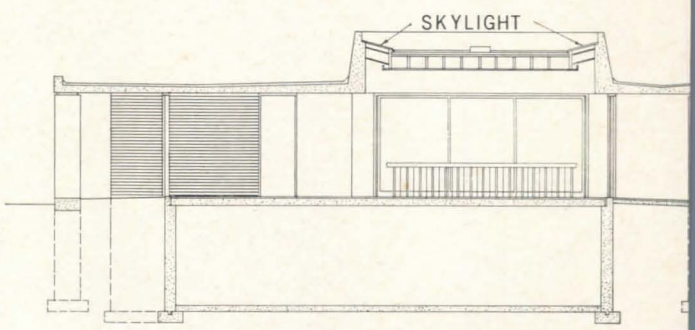
INTERIOR DESIGNER: *Bernice Davis Fligman*

A very noteworthy and sensitive use of co
crete, and other durable and easily maintain
materials is apparent in this house. The ma
design force comes from the strongly expresse
concrete frame, with its asymmetrically plac
columns and slab roof; brick and glass fill
walls are set well back to increase the effe
Among the niceties of detailing is an indent
tion created between the joint of the colum
to the underside of the roof slab. This w
planned to avoid the invariably unsightly joi
that occurs wherever the pouring of concre
is interrupted. The concrete has a good finis
plastic lined forms and careful vibrating du
ing the concrete pouring gave a smooth lig
gray surface with no honeycombing. None
the concrete surfaces were worked over, exce
for washing to get rid of the "gravy" that o
curs on the surface. The concrete is left expos
inside as well, complemented by floors of gu
metal paving brick and ceilings of textur
plaster or wood.

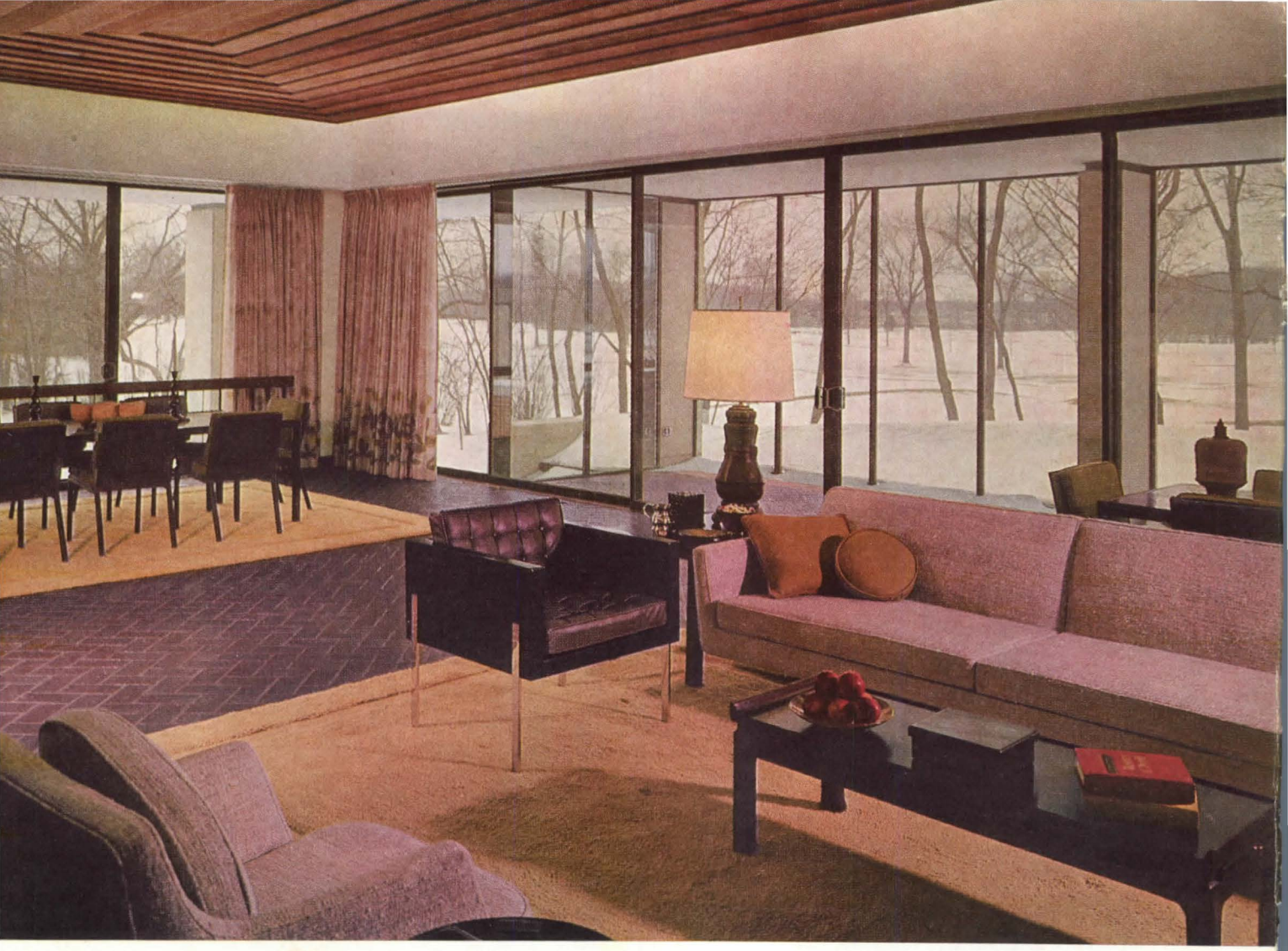
A "FLOATING" CEILING DRAMATIZES THE LIVING AREA



ROBERT NOWELL WARD PHOTOS



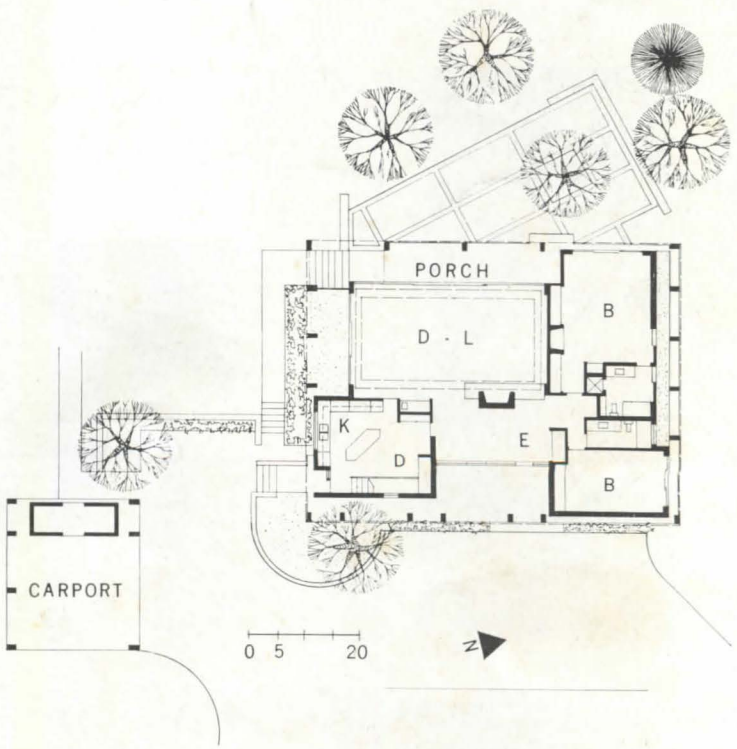
SECTION THROUGH ENTRY & LIVING ROOM



ne Highland Park house is located on the ge of a golf course in a suburban neighbor-od. Major rooms of the house open toward e westerly view of the course, with as little posure as possible to neighboring houses. ide roof overhangs give good sun control. To give added light to the living areas, an teresting "floating" ceiling was developed. raised parapet was designed with walls to t as beams to support the long spans in the om, and to give a higher ceiling to the big ea. Within this frame, a ceiling panel of od frame clad with rough sawn lapped ards in a mitered pattern, was suspended neath a peripheral skylight. The mass of e parapet also reinforces the strength of e exterior facades.

Though basically a one-story house, a slope the land to the south was used to gain ist-high windows in servants' rooms on at side of the basement. A utility room is the north side of the basement. Brick gar-n walls and steps help to make the level nsition at the south corner. The house has -season cooling and gas heating.

The cost of the house was approximately 5,000, excluding lot, landscaping and inte-r furnishings.



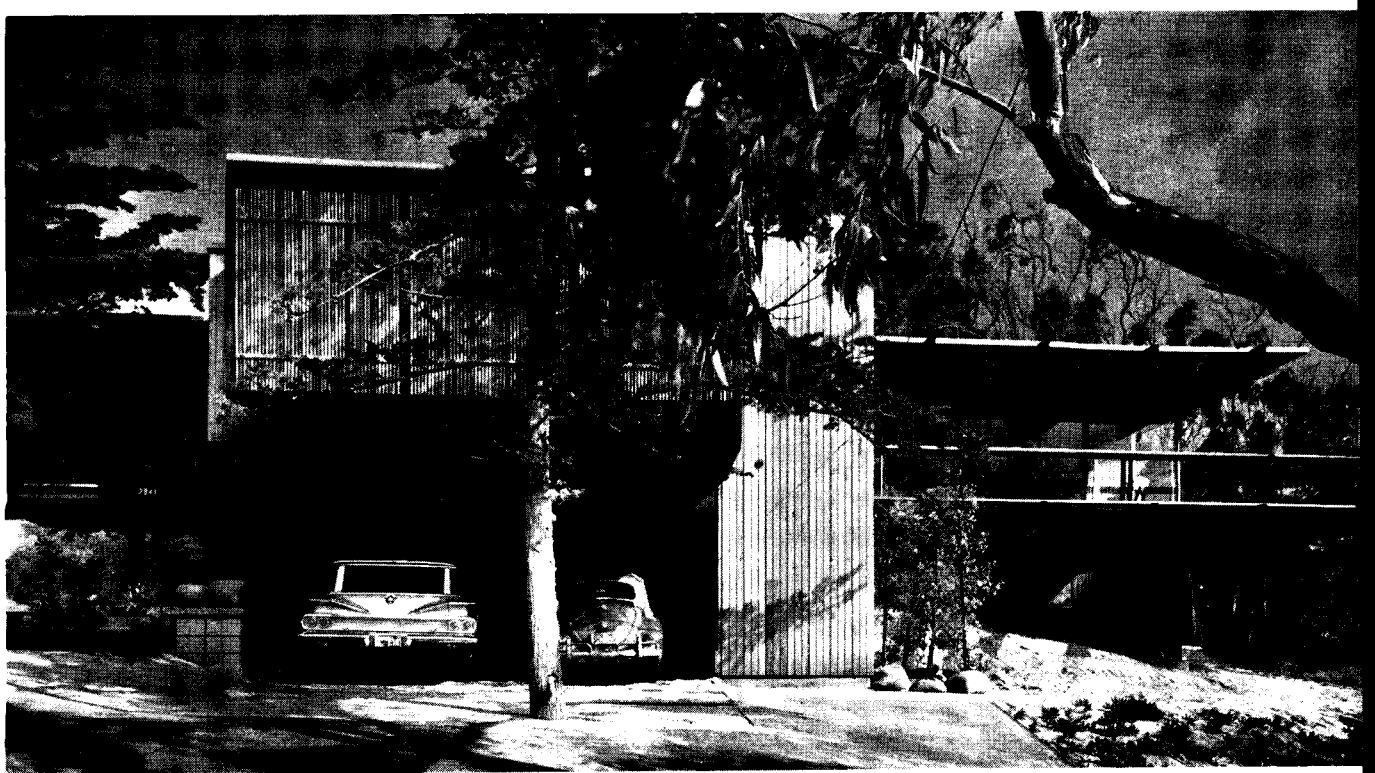
NATURAL MATERIALS AND LANDSCAPE BLEND IN OPEN-PLAN HOUSE

A deceptive simplicity pervades the design of this warm and extremely attractive house. Closer inspection, and in the entrance photo at right, will quickly reveal the careful detailing and material selection that has been put into its construction. Robert Jones describes it as: "An attempt to rest the structure in an unobtrusive way on the sandstone and among the existing trees and landscape, utilizing natural materials. The plan controls the psychological approaches to the different spaces and expands them into the nature around them. Privacy is controlled primarily by orientation and planting."

The "attempt" is a very successful one, with a variety of terraces, porches and courts e tending each room into its area of outdoo

The plan is a very open one—all the li ing areas are really one room, and the mast bedroom has sliding plastic shojii screens f separation—but adroit use of baffle walls cr ates a series of intimate spaces within t over-all big "room." Variety in the vistas se from different points in the house is controll in the same way.

The actual enclosed space in the house is surprisingly small 1,600 square feet, conside ing how large the house appears. The cost w about $30,000, excluding lot, landscape a furnishings. Heating is by forced warm a



DOUGLAS SIMMONDS PHOTOS

ARCHITECTS: HESTER • JONES AND ASSOCIATES

PARTNER IN CHARGE: *Robert E. Jones*

Residence for Mr. and Mrs. Robert E. Jones

Del Mar, California

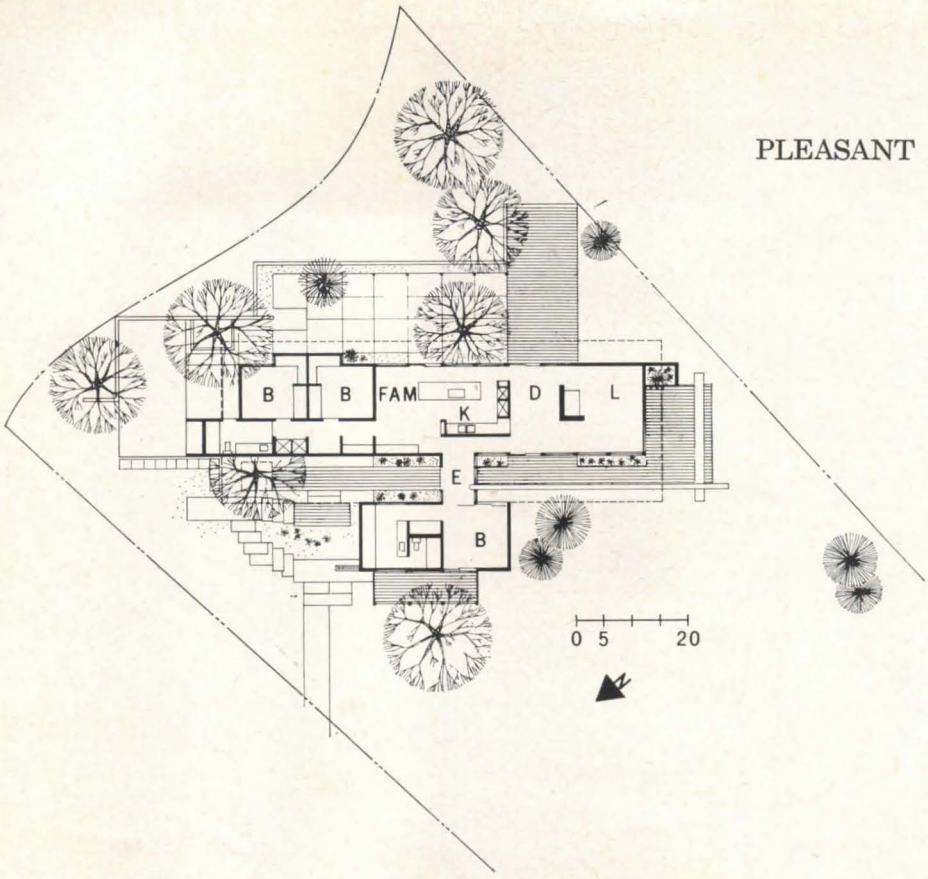
ENGINEER: *Harry F. Deardoff*

CONTRACTOR: *Herbert Turner*

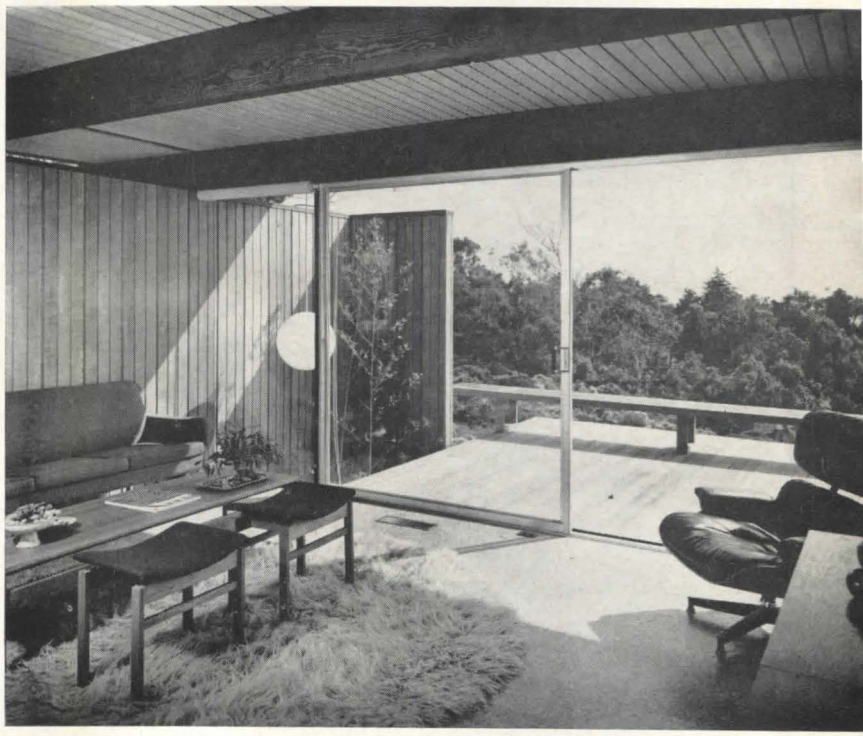
LANDSCAPE ARCHITECTS: *Wimmer & Yamada*

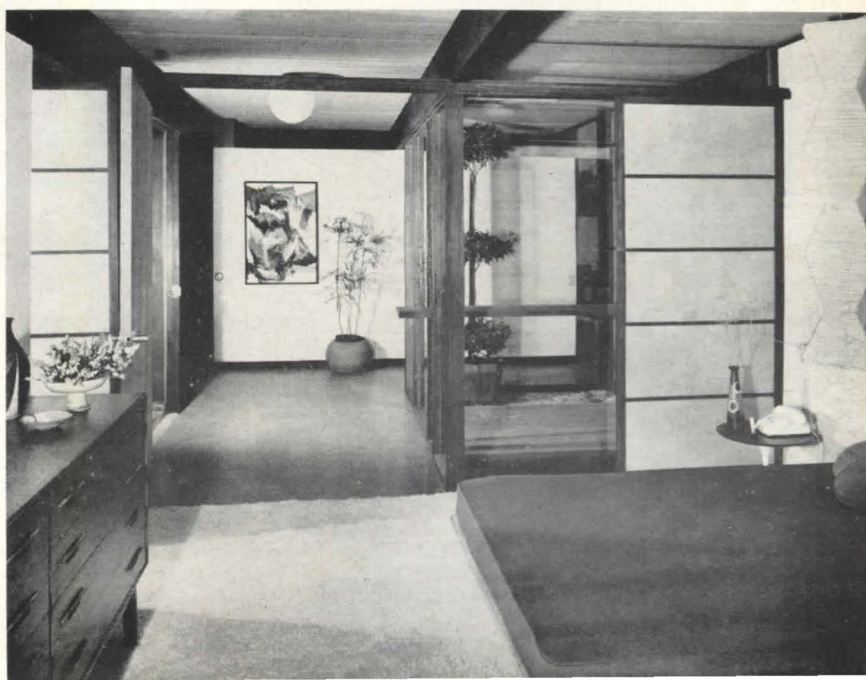
INTERIOR DESIGNERS: *Design Center*

PLEASANT FLOW OF SPACE HIGHLIGH
EVERY AREA OF THE HOU



DOUGLAS SIMMONDS PHOTOS

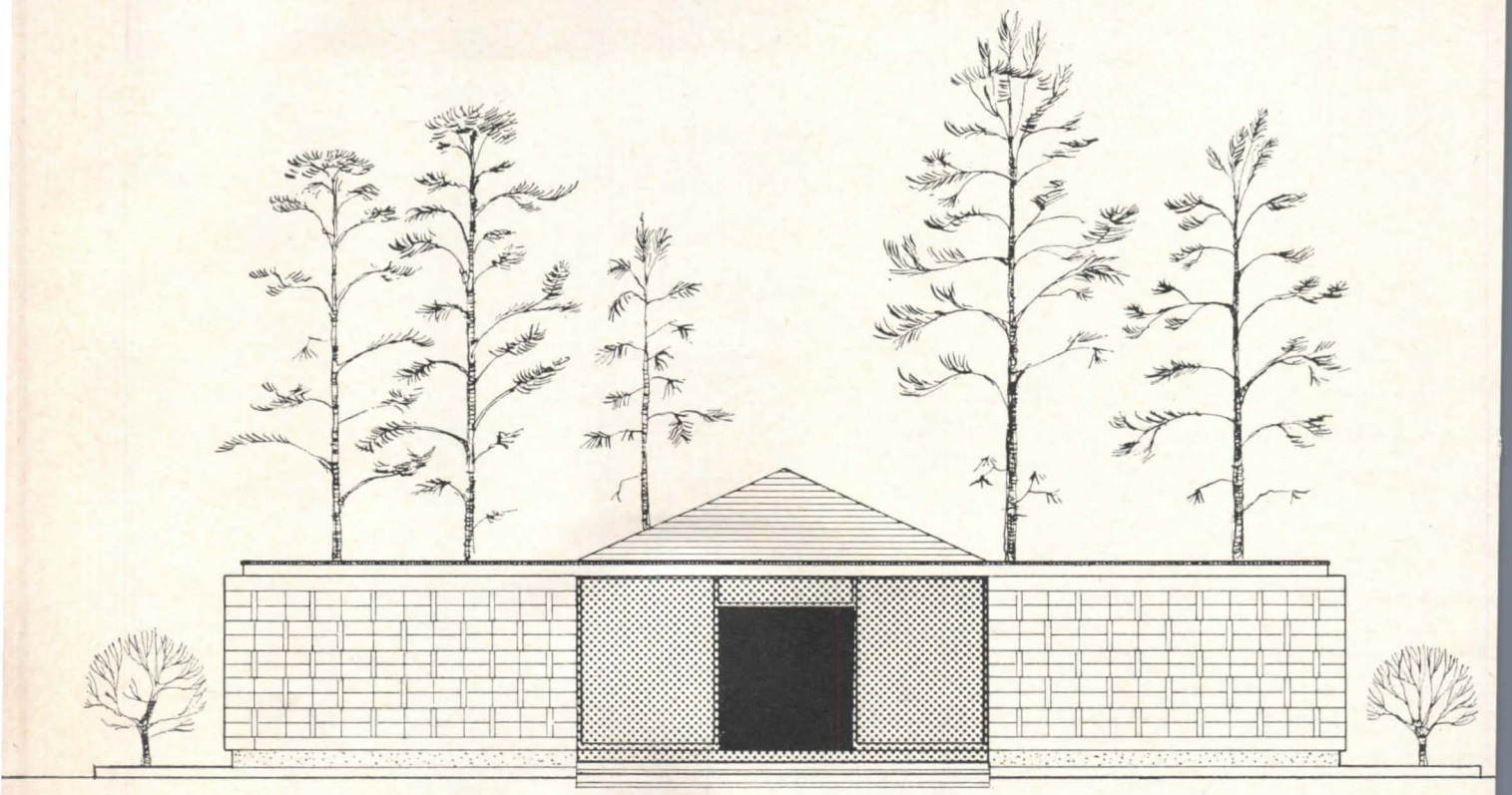




ne of the many pleasant areas in the Jones ouse is the kitchen-family room (*across-age*). One entire wall of the room opens nto the big terrace (*top right*), making it xtremely convenient for either family meals r big buffet parties in nice weather. The tchen appliances are arranged in a some-hat unorthodox manner in the room. Ovens nd refrigerator are built into walnut cabi-ets at one end, and the sink set into the astic counter of the adjoining fin wall. The nge, however, is built into a "cooking and ting island" in the center of the room, and n double as food warmer for a buffet. The eight of this unit was carefully studied to it both uses.

The house was also planned for later ex-nsion in three directions. The family room n be expanded beneath the structural sup-rts forming a trellis over the terrace when e children grow to teenage and need an en-rtainment area of their own. For more rmal dining, a room can be added under milar supports, and the present area con-rted into a music and bar room. Finally, a udio-guest room will be added beneath the ing room, and will have a separate access om the remainder of the house.

The house has a Douglas fir post and beam ame on a concrete foundation, and exterior alls of redwood. The colors are kept soft: ame and trim are all brownish-black creo-te; exterior concrete is colored with raw nber or whitish-ochre pebbles; and the alls finished in a buckskin hue. Interiors e similar, with gypsum board walls paint-off-white or raw umber, and natural wood lings stained light gray. Floors are vinyl rk, except for unglazed tile in the baths.



NEO-CLASSIC BUILDER HOUSE IN CONCRETE BLOCK

A symmetrical and classic design has been devised here for a development in New Jersey. It is built of a simple material—painted concrete block—but the over-all effect is one of considerable sophistication. Perhaps the most interesting stylistic feature is the handling of the exterior wall masses. All openings, windows and doors, are massed together in banks, leaving the masonry portions of the walls solid and unbroken. The masonry masses are further emphasized by projecting them beyond the lines of the foundation and cornice. The central portion of the house is opened front and back by glass walls, and flanked by inset terraces. Its apparent spaciousness is given further emphasis by the use of a pyramidal roof over the area; ceilings follow roof line.

The plan organization is a simple, but workable one, with three bedrooms to the right of the living area, and dining room, kitchen ar a fourth bedroom or study to the left. A sto age unit shields the living area from the e trance and creates a foyer.

For repetition in a development, the hou was planned for some variations of the pr jecting pattern on the exterior wall surface and of the raised portion of the roof. The la ter would be obtained by using precast barr vault sections, a concrete folded plate roof, a raised flat-roofed area with a clereston around its periphery. The building is design around a 5-foot module, and can be varied size by varying the size of the module.

The approximate cost of the house w $25,000, excluding lot, and landscaping.

The house won the design and merchandi ing Eastern Region awards in the 1962 Co crete Industries Horizon Homes Program.

ARCHITECT: JOHN ROBERT GILCHRIST

Development House for Robilt, Inc.

Lakewood, New Jersey

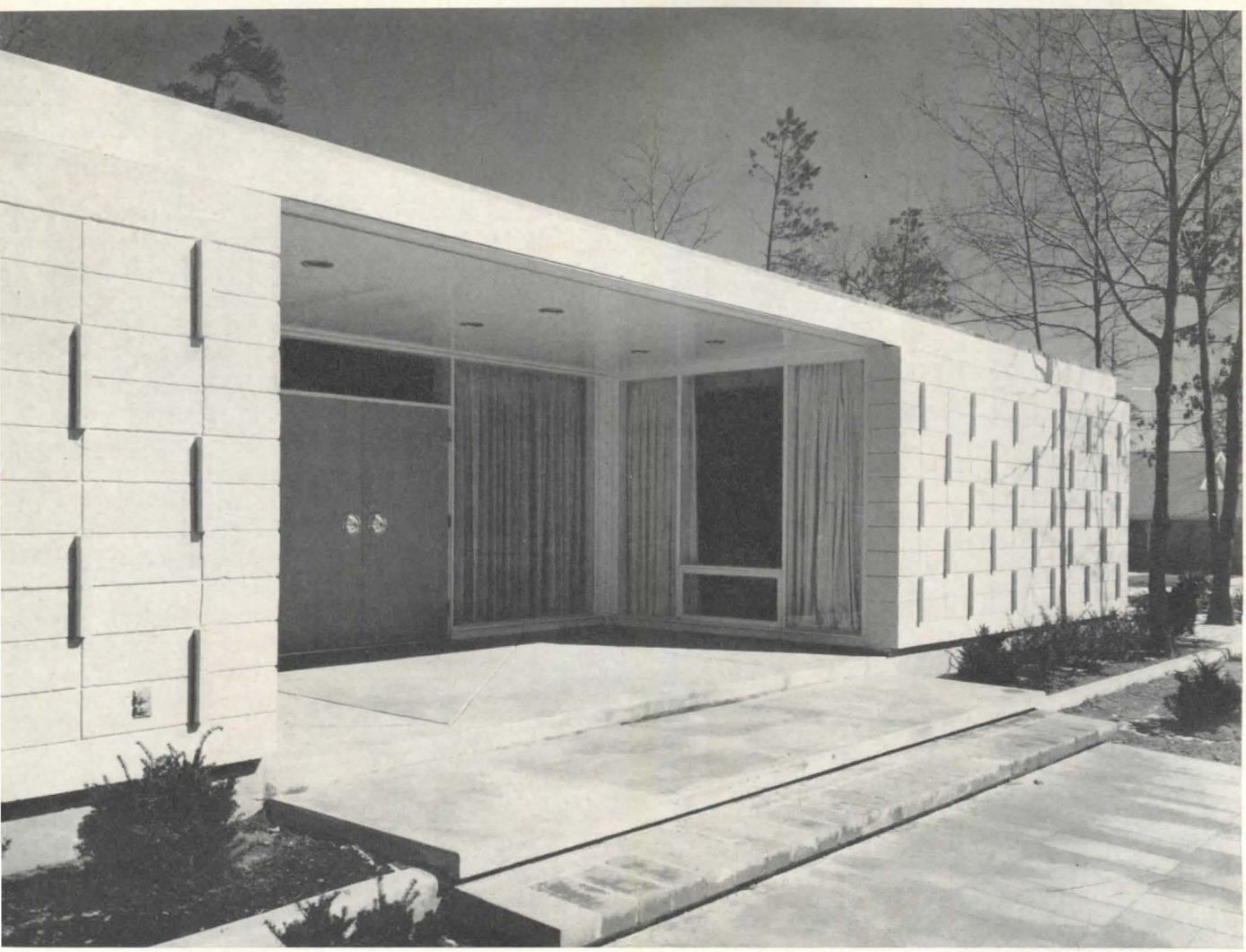
ENGINEER: *Marcus Russell*

CONTRACTOR: *Robilt, Inc.*

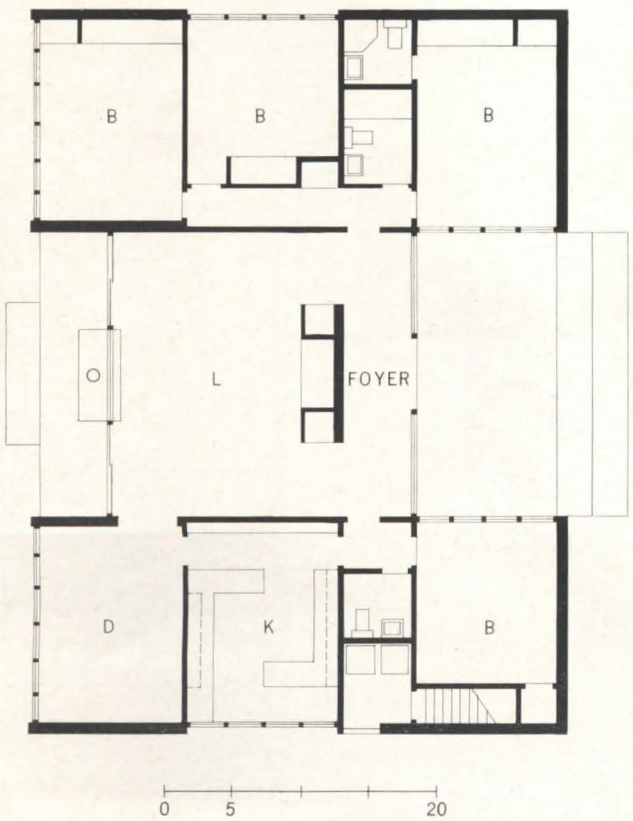
LIGHTING CONSULTANT: *Robert Thompson*

LANDSCAPE ARCHITECT: *Joseph Theibauldt*

INTERIOR DESIGNERS: *Theodore Weiss Associates*



JOSEPH W. MOLITOR PHOTOS

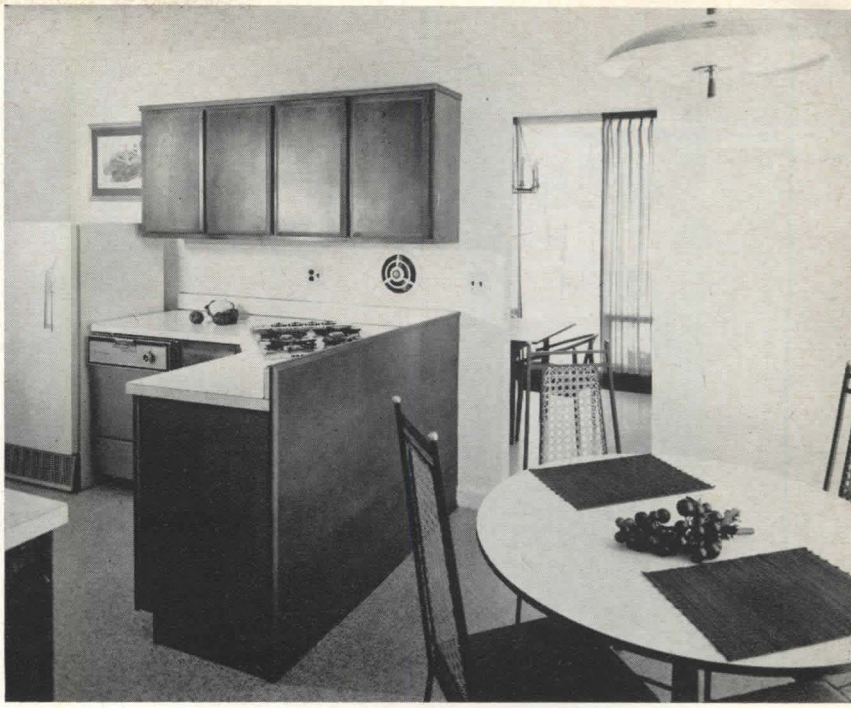


Several methods were used in the Robilt house to avoid a heavy appearance in the banks of solid masonry walls. These include the previously noted projections of the walls and the grouping of the windows, as well as floor to ceiling windows, light colors, and surrounding the house with a gravel garden.

The structure was built of concrete block cavity walls on 12-inch block foundations. Interior partitions are painted or papered wallboard. The roof has wood rafters, plywood deck on flat areas and built-up surfacing. The rafters and pine sheathing of the pyramidal roof are left exposed.

The original scheme for the house, as shown in the plan, was designed with a basement. The model shown in the photographs, however, was constructed with a concrete slab on grade, with the stair space devoted to the mechanical equipment required for heating, cooling and ventilating. The floors are surfaced with carpet, vinyl and inlaid linoleum. The plan was also reversed for its particular, corner site. A detached garage of similar design to the house is on the service wing side, and shields the garden.

E DESIGN AND COLORS OF THE
USE GIVE A LIGHT AND AIRY
OK TO THE MASONRY STRUCTURE



JOSEPH W. MOLITOR PHOTOS

WARREN REYNOLDS OF INFINITY, INC. PHOTOS

AN ATRIUM ADDS AN INDOOR GARDEN TO A NORTHERN HOUSE

Considerable farsightedness for the inevitable changes in family occupancy are apparent in this serenely elegant house. It is a large house with seven bedrooms, planned for a young couple with small children. However, the bedrooms were explicitly planned so that they could be easily shut off when the children go away to college. The present maid's quarters are also designed to serve as a future guest suite with a private garden.

The house is built on a 40-acre site with meadows, woods and a small lake, and rises to a wooded hill on the northwest. The area chosen for the house was a narrow ledge half way up the hillside for protection from the severe northwest winds. The house was carefully sited so that few of the large, old trees were lost. Landscaping was planned for a long range development of the site's natural assets. A hedge of yew and a gravel bed around the perimeter provide a base for the house. To supplement planting for months beyond the short growing season of the area, the big entrance hall has been developed into a lush skylighted atrium, or entrance court.

ARCHITECT: BLISS AND CAMPBELL

House in Minnesota

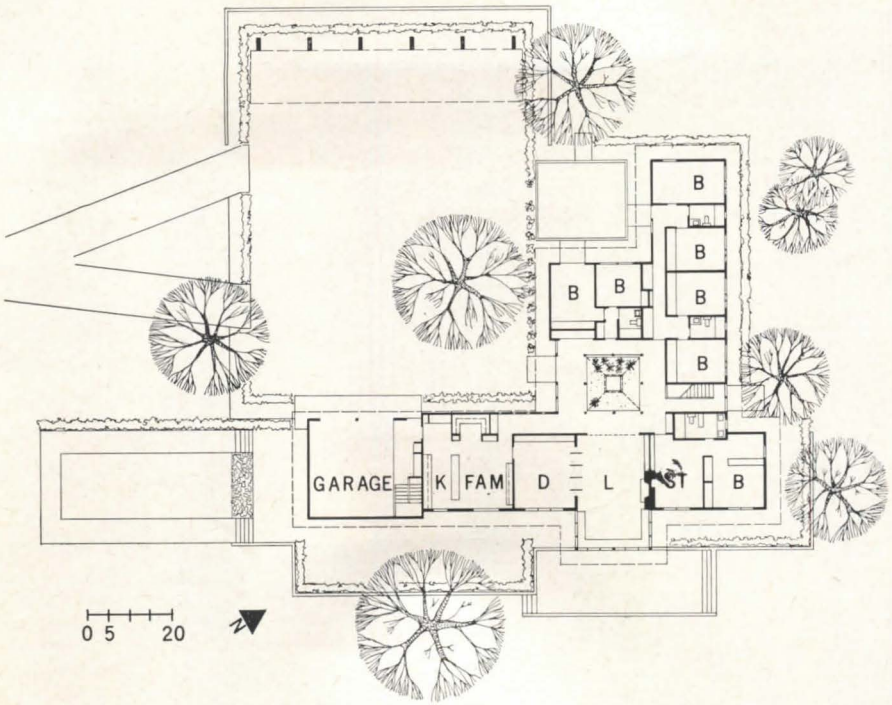
STRUCTURAL ENGINEERS: *Meyer & Borgman*

MECHANICAL ENGINEERS: *Frey & Bergsten*

CONTRACTOR: *Joe Peterson*

LANDSCAPE ARCHITECT: *Dan Kiley*

INTERIOR DESIGNERS: *Dayton's Studio*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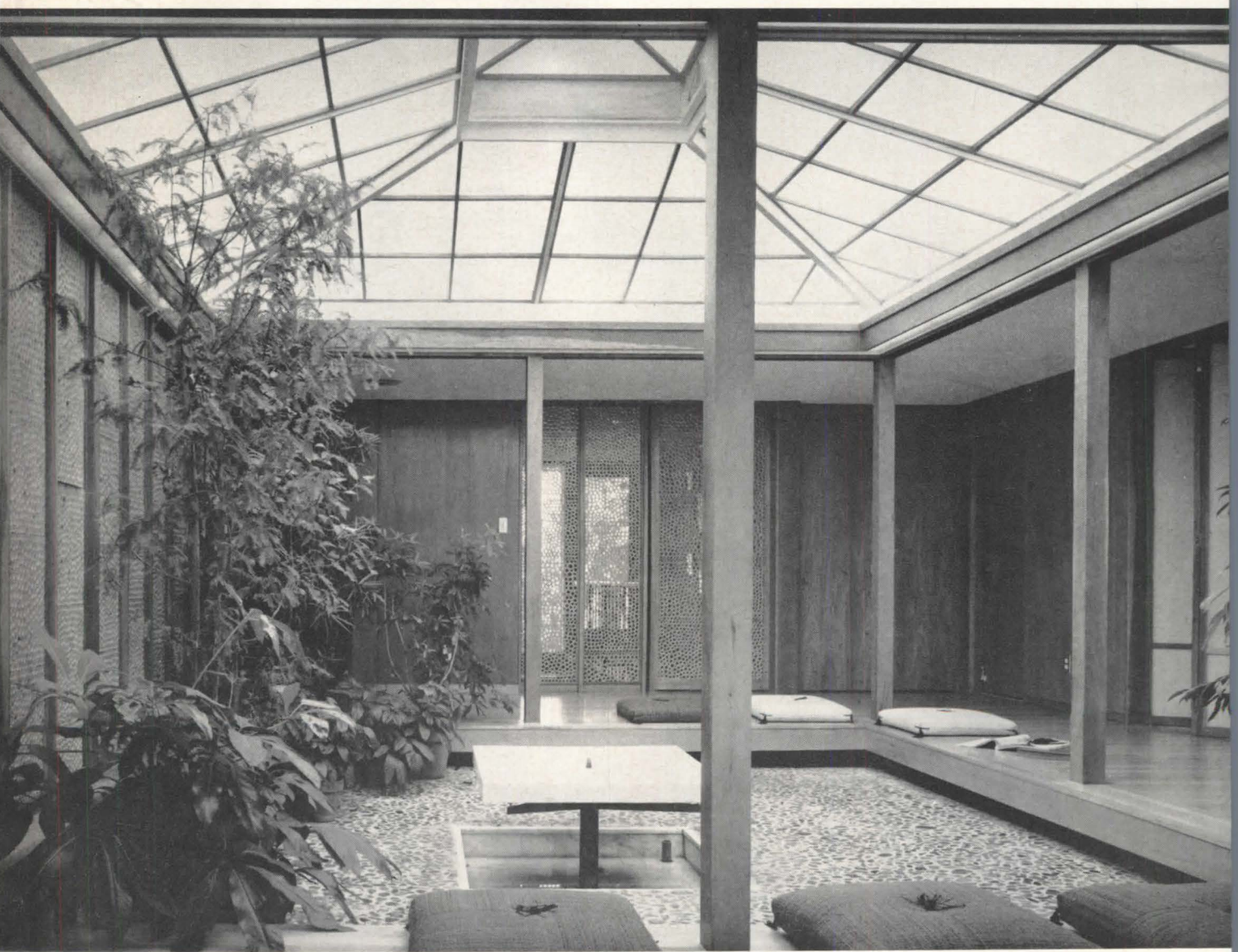
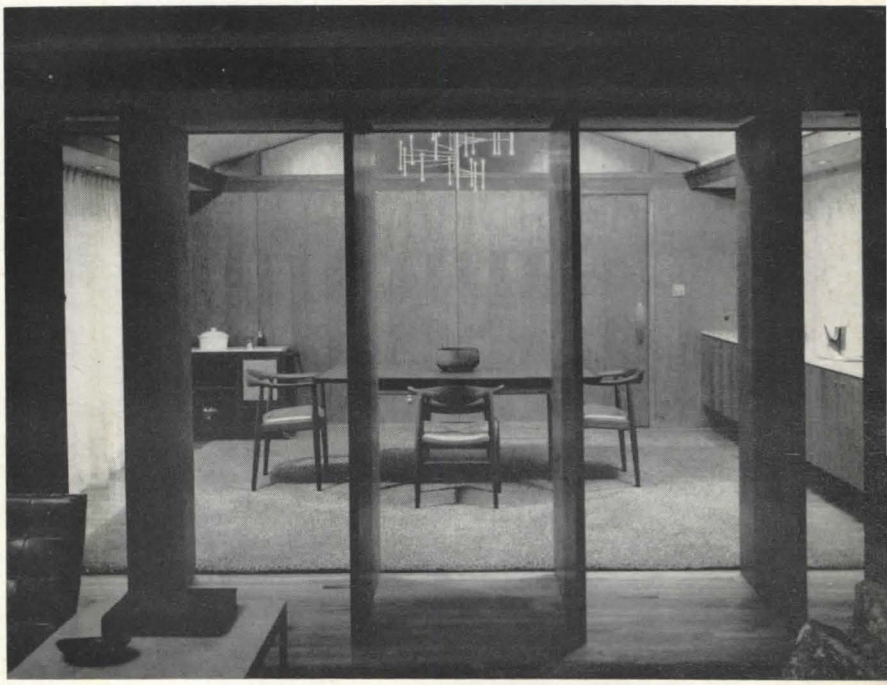


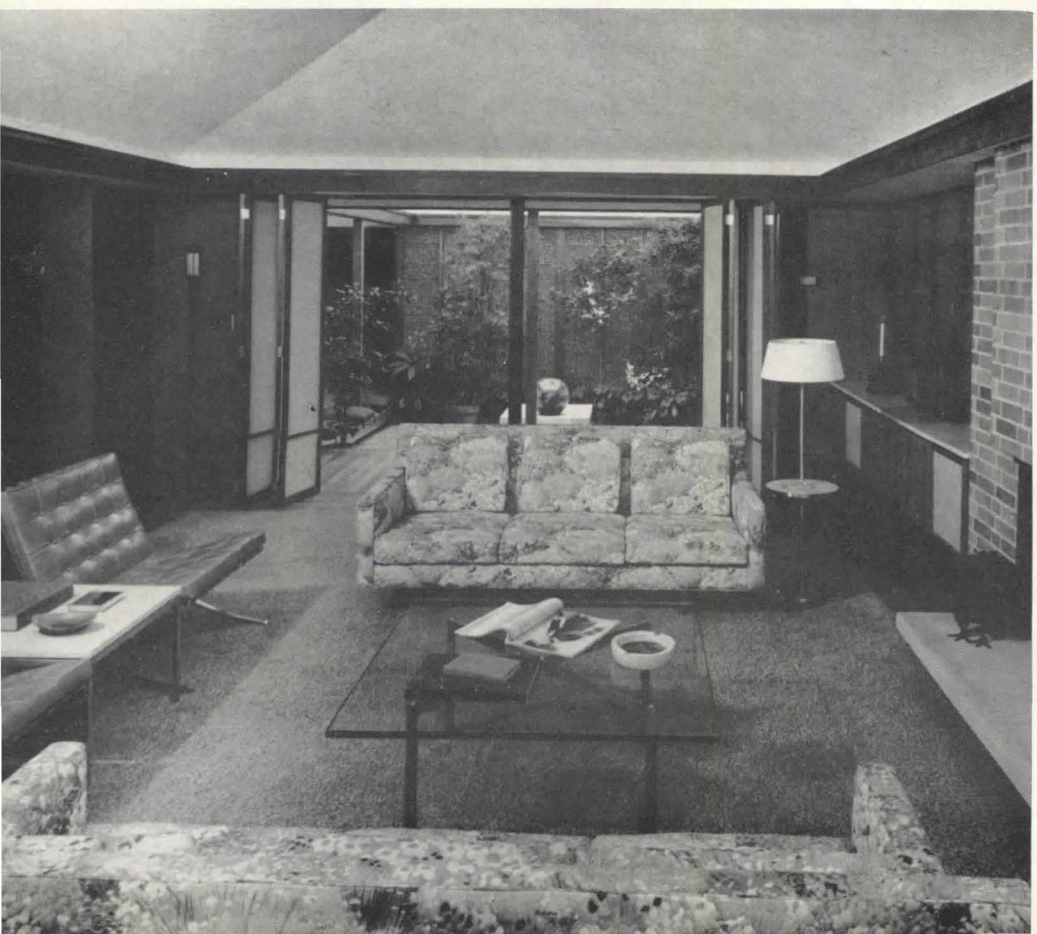
specially during the cold winter months, e courtyard adds pleasant daylight and stas of greenery to the living areas and allways of this Minnesota house. Translunt folding and sliding doors close off the eas when needed.

As noted previously, the bedroom wing is vided into three sections: the master bedom suite and study are in the lower right rner of the plan, the maids' (and future uest) bedrooms are at left center, and the mainder are for the children. Any of these n be shut off from the rest of the house, as eeded.

The house is built of wood frame on conete block foundations. The exterior is natal cedar boat lumber. The roof is pitch and avel for the lower pitched areas, asphalt nd gravel for the steep ones. Interior walls e cherry paneling and trim, combined with aster for contrast. Floors are oak in the ain living areas, cork in the children's wing, harcoal marble pebbles set in cement for the ourt floor. Marble is used for the fountain ab, and for the counter tops of the cherry uilt-in cabinets. The screens in the court are iced bamboo. The house has a warm air eating and ventilating furnace, with a hree stage oil burner. There is a small laundry in the children's wing, and a basement undry, storage, shop and playroom.

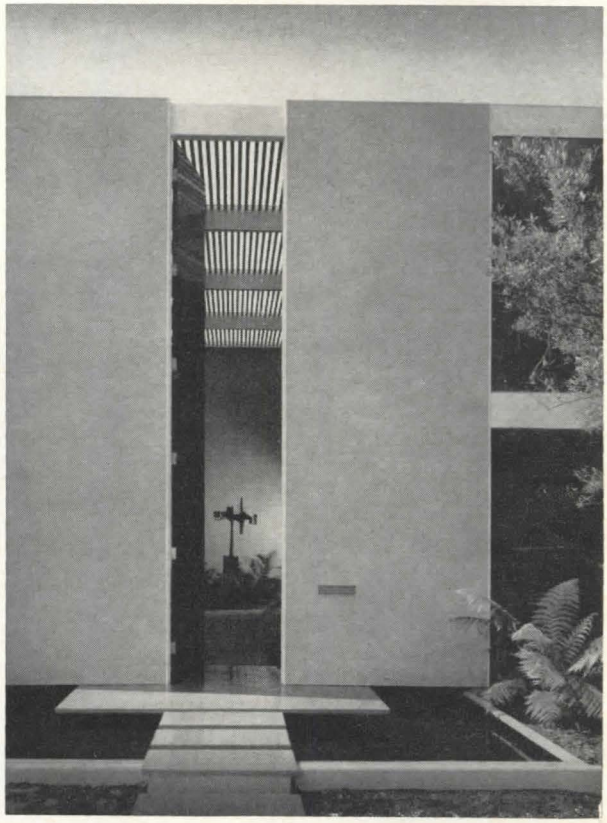
UNUSUAL WALL OPENINGS MERGE SPACE OF COURTYARD TO MAIN LIVING AREAS





WARREN REYNOLDS OF INFINITY, INC., PHOTOS

N ELEGANT SMALL OUSE DOUBLES ITS PPARENT SPACE BY A EMI-ENCLOSED COURT



JULIUS SHULMAN PHOTOS

CHITECTS: KILLINGSWORTH, BRADY, SMITH ASSOCIATES

idence for Mr. Edward Frank

g Beach, California

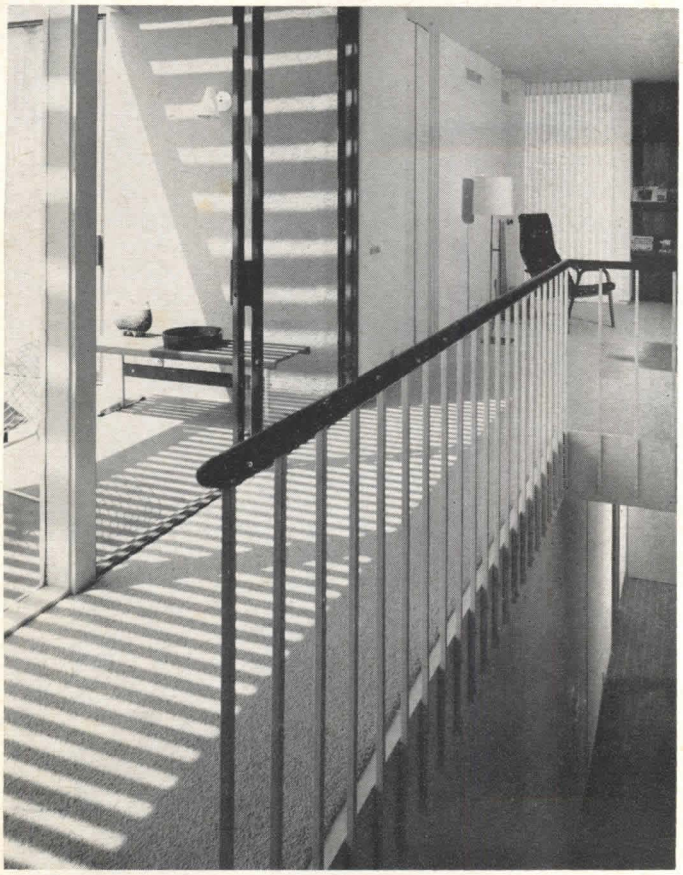
TRACTOR: *Stromberg & Son*

ERIOR DESIGNER: *Edward Frank*

is handsome, sophisticated little house gets ite an air of grandeur from its big walled- trellis-covered entrance court. The site is a g, narrow one, facing the water front at e end, and a public street on the other. As th approaches are used frequently, entries e placed at both ends of the court, to afford ather spectacular arrival from either direc- n. The sides and street front of the house e blanked off for privacy, and all major oms open, via glass walls, on the court. The d walls of rooms facing the water are sim- rly glazed. Draw draperies are provided r times when privacy is required.

The solid walls are constructed of pre- sembled, two-story-high panels. Their verti- ity is emphasized by the use of an entrance or of the same height on the water side.

The house is one of the latest to be con- ucted under Arts and Architecture's "Case udy House" building program.

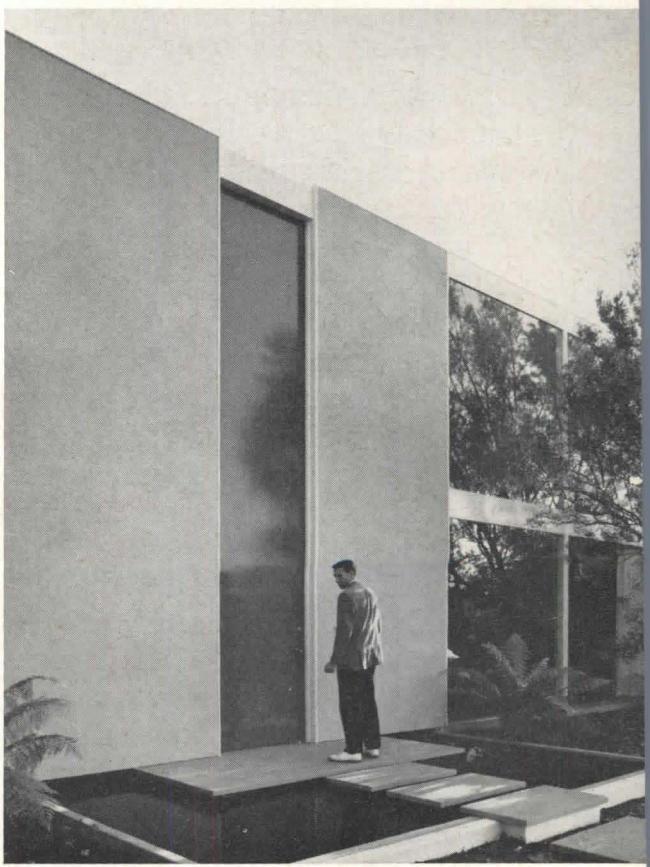


The plan is a simply arranged, open one. the street front, the carport and a cove entrance terrace are at the ground le flanked by the little service wing with separate entrance at the side. The remain of the first floor is one big room, with onl cabinet to separate the living and din areas.

On the upper level, the study and mas bedroom suite also form one big open ar but the rooms can be shut off by slidi doors. A guest room is set somewhat ap at the front of the house, and opens on upper terrace over the carport. A short b fle wall at the street end adds privacy to room. The guest bathroom is placed so it double as a powder room.

The main "decoration" in the house co from lush plants and shadow patterns c by the trellis topping the court. One mig also add the elegant reflecting pool edgi the court and waterfront entrance. All ot details have been kept utterly simple and obtrusive, making the sensitively worked proportions the dominant factor in the sign. Interior furnishings have also b kept to a well-chosen minimum.

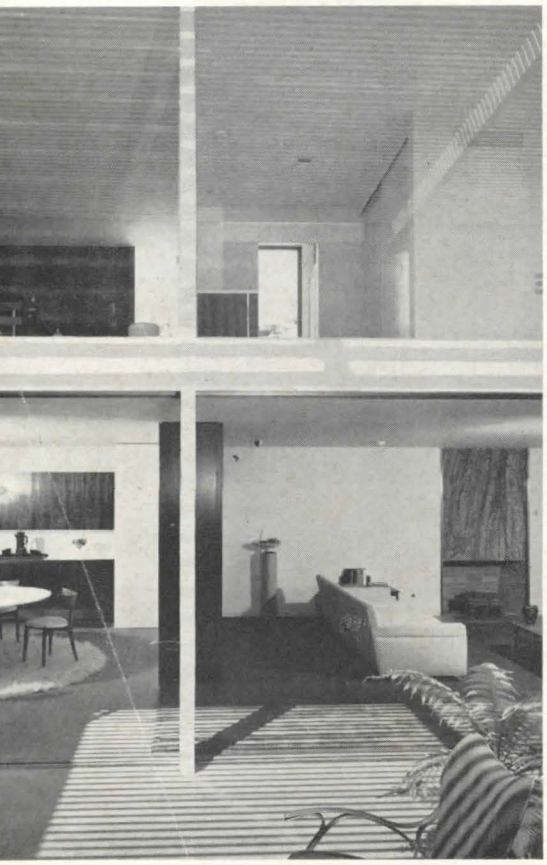
JULIUS SHULMAN PHO

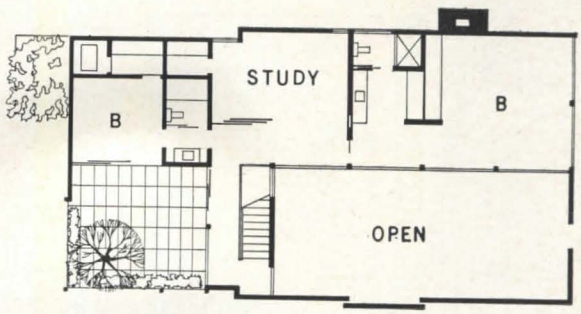


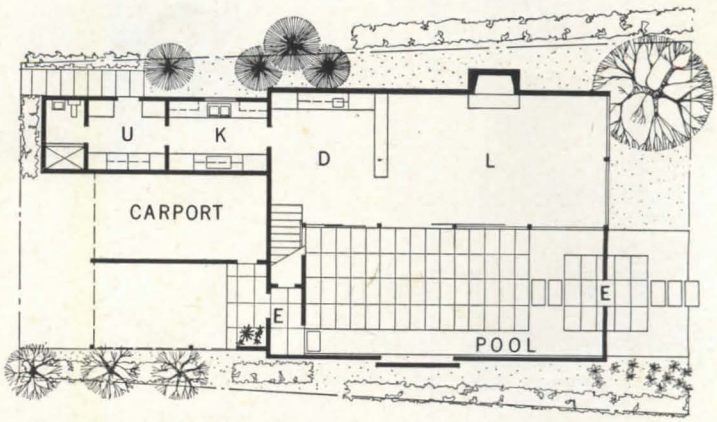
e Frank house is framed with Douglas fir, :h exterior wall panels of painted plaster. nilar painted plaster is used for walls and lings throughout the house. The roof is ; and surfaced with built-up tar and ıvel with insulation batts in the joist ıce. Sliding glass doors and windows are med in aluminum.

The dramatic entrance door is metal clad, l measures 3 feet 6 inches by 17 feet 4 hes. All other doors are flush wood, except the use of textured plywood for the ga-ge door. The house has year-round air con-ioning in the enclosed parts. The kitchen l baths have exhaust fans. The house is o equipped with a built-in Hi-Fi and inter-nmunications systems, and has a low-tage, remote control electrical wiring tem. Kitchen equipment—including sink, ıge, refrigerator, garbage disposer, dish-sher and oven—is all built in. Cabinets walnut, with laminated plastic counter faces in kitchen and baths.

Floors in the living areas are carpeted. ose in the dining room and the court are arry tile. Vinyl asbestos tile is used in the chen and vinyl tile in the baths.







0 5 20

LOWER FLOOR

A TWO-STORY HOUSE USING A SYSTEM OF STEEL COMPONENTS

This extremely pleasant, attractive house is
further development, using steel component
for the shell, of Carl Koch's well know *Tech*
built design in wood. Interior finishes are c
more standard materials which have bee
available for some time. The architects an
developers expect that the new methods, a
the steel system used here, will substantiall
reduce maintenance, speed erection and cu
construction costs of houses. There is, c
course, considerable design and plan varia
tion possible in the use of the components. Th
basic elements of the system include: (1)
roof formed as a stressed-skin truss, using a
aluminum-coated steel roof sheet as the to
cord; (2) a load-bearing, window-wall sys
tem; (3) load-bearing, prefinished exteric
wall panels; and (4) a floor-ceiling syster
that also functions as an air distribution sys
tem. The roof truss and steel framing syster
provides open spaces for flexible, non-bearin
interior partitions. The steel shell erected
priced at about $4,076 and erection time
approximately one week.

ANTHONY LINCK PHOTOS

ARCHITECTS: CARL KOCH & ASSOCIATES

Development House for Armco Steel Corporation

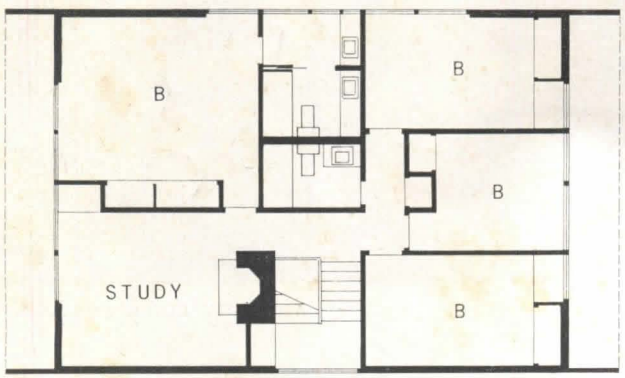
Yorktown Heights, New York

HEATING ENGINEER: *Leo Brissette*

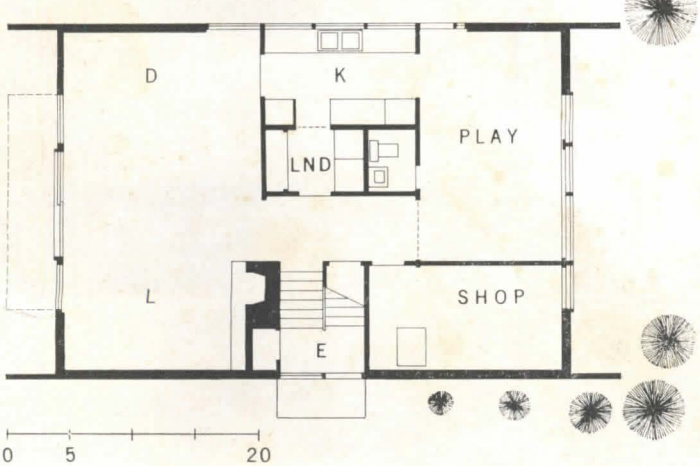
CONTRACTOR: *Eastrock Construction Company, Inc.*

INTERIOR DESIGNERS: *Edward Diehl Associates and Design Research, Inc.*

ANTHONY LINCK PHOTOS, COURTESY ARMCO STEEL CORP



UPPER FLOOR



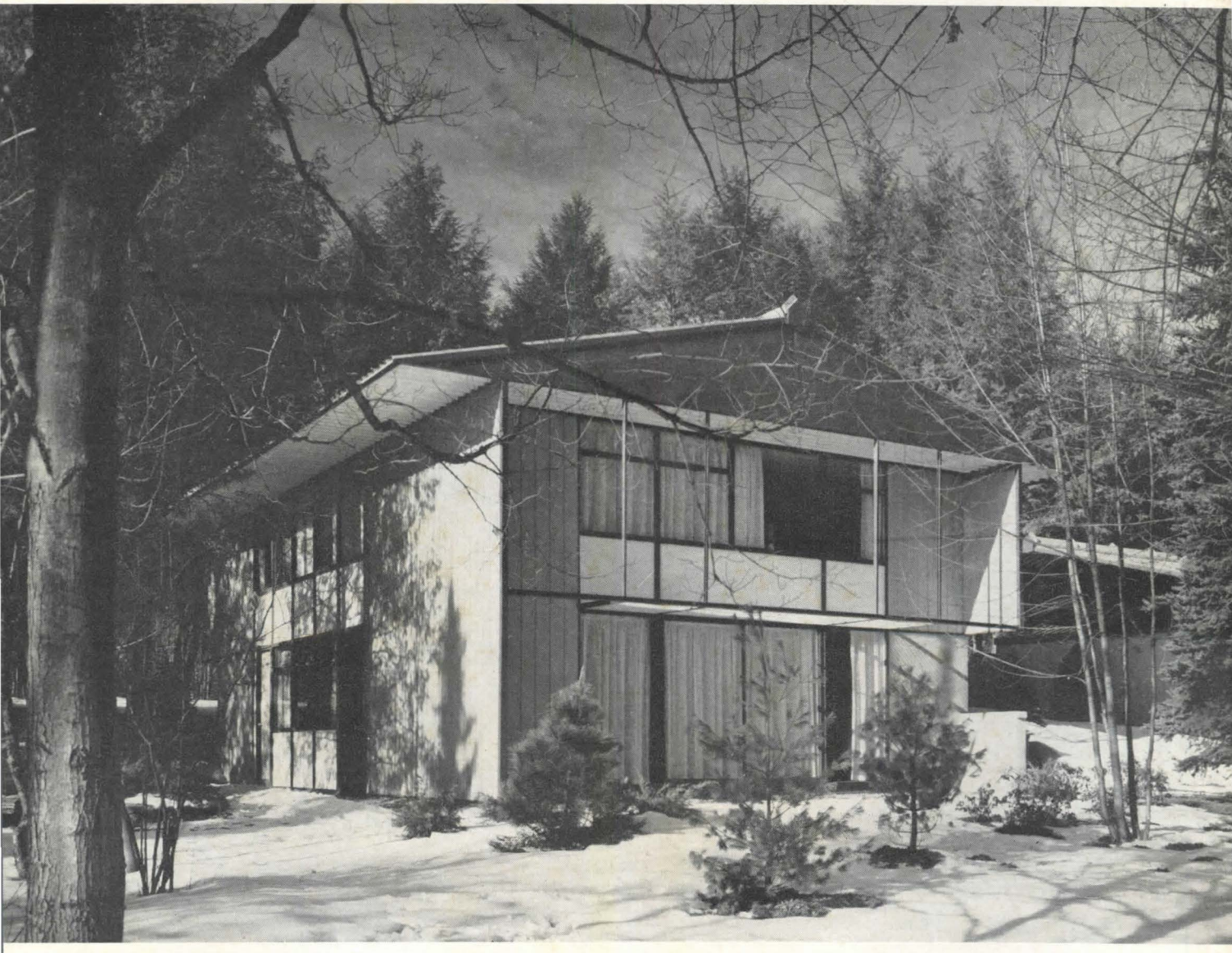
THE PILOT MODEL OF THIS DEVELOPMENT HOUSE HAS A SPLIT-LEVEL ENTRY

This house in Yorktown, New York, is a two-story, 28- by 40-foot building, with 4-foot eaves on all four sides. Use was made of a sloping lot to gain a convenient mid-level entry, and utilize foundation walls to support the upper story on that side.

The plan is organized with living and entertaining areas (plus service areas) on the lower floor, and four bedrooms and a study on the top level. Partitions are prefabricated gypsum board panels with fiberboard tube cores. Floors in the living areas have wall-to-wall carpeting, those in the kitchen and playroom are surfaced with vinyl asbestos, and bath floors are ceramic tile. Ceilings on the lower floor are the steel undersides of the floor system. The upstairs ceilings are gypsum board. All doors are steel. The outside sunshades are expanded wire mesh.

The heating is by a warm air system, with the furnace located in the shop area. Thermal insulation is plastic foam. Both the living room and the study have brick fireplaces.

The kitchen is conveniently placed to serve either the playroom and the dining area. The adjoining laundry area doubles as a pantry. The approximate cost of the entire house was $28,000, excluding lot, landscape.



ARCHITECTS OF THE RECORD HOUSES OF 1963

Houses designed by the following firms and individuals appear on pages noted:

P. M. BOLTON ASSOCIATES 62

5111 Woodway
Houston, Texas
P. M. Bolton, A.I.A.

BLISS AND CAMPBELL 122

1409 Willow Street
Minneapolis 3, Minnesota
Anna Campbell Bliss
Robert Lewis Bliss, A.I.A.

EDWARD D. DART 106

21 E. Superior Street
Chicago 11, Illinois
Edward D. Dart, A.I.A.

ULRICH FRANZEN & ASSOCIATES 90

124 East 40 Street
New York, New York
Ulrich Franzen, A.I.A.

JOHN GILCHRIST 118

60 West Main
Bergenfield, New Jersey
John Gilchrist

JULES GREGORY 78

Lambertville, New Jersey
Jules Gregory, A.I.A.

HESTER • JONES AND ASSOCIATES 110

7863 Herschel Avenue
La Jolla, California
Robert E. Jones
Henry H. Hester, A.I.A.

G. P. JENNEWEIN & J. J. JENNEWEIN 50

G. P. Jennewein, A.I.A.
101 Park Avenue, New York, N.Y.
J. J. Jennewein, A.I.A.
310 Jackson Street, Tampa, Fla.

WALK C. JONES JR. 66

1215 Poplar Avenue
Memphis, Tennessee
Walk C. Jones Jr., A.I.A.

GEORGE FRED KECK-WILLIAM KECK 98

612 North Michigan Avenue
Chicago 11, Illinois
George Fred Keck
William Keck, A.I.A.

KILLINGSWORTH • BRADY • SMITH & ASSOCIATES 114

3833 Long Beach Bouleva
Long Beach, California
Edward A. Killingsworth
Jules Ellsworth Brady, A
Waugh Smith, A.I.A.

KNORR & ELLIOTT 58

40 Gold Street
San Francisco, Californi
Don Knorr, A.I.A.
Edward Elliott, A.I.A.

CARL KOCH & ASSOCIATES 126

55 Brattle Street
Cambridge, Massachuset
Carl Koch, A.I.A.

WILLIAM MORGAN 94

1611 Ocean Boulevard
Atlantic Beach, Florida
William Morgan

NELSEN, SABIN, AND VAREY 74

1314 N.E. 43rd Street
Seattle 5, Washington
Ibsen A. Nelsen, A.I.A.
Russell B. Sabin

GEORGE NEMENY 86

157 West 57th Street
New York 19, New York
George Nemeny, A.I.A.

OPPENHEIMER, BRADY AND LEHR 102

55 West 42 Street, New
Thomas C. Lehrecke, A.
Herbert B. Oppenheime
John J. Brady

VLADIMIR OSSIPOFF 54

1210 Ward Avenue
Honolulu, Hawaii
Vladimir Ossipoff, F.A.

PAUL RUDOLPH 70

31 High Street
New Haven, Connecticu
Paul Rudolph, A.I.A.

DONALD A. WEXLER 82

557 S. Palm Canyon Dr
Palm Springs, Californ
Donald A. Wexler, A.I.

OST OF RECORD HOUSES NEAR YOU

using Record Houses our readers e asked, "If I build a house like and so built in ———— city at would it cost here?"

Ve again put this question to My- L. Matthews, editor of the Dow lding Cost Calculator and Valua- Guide, an F. W. Dodge Corpora- service. He did some research presented us with the answers those Record Houses for which data was available, as though were to be duplicated in 14 cted cities located in representa- geographic areas of the United States. The figures for each listed city would be applicable within a 25 mile radius of it.

In an effort of this kind it must be recognized that the estimates in the tabulations following can only be approximate within 5 to 8 per cent one way or the other, and maybe more if unusual abnormal conditions prevail in one locale or another. However, over a period of 37 years the Dow Calculator has established a good record and we believe their figures will work out well for the purposes intended.

If you are impressed by certain Record Houses look up their local estimated approximate cost for a location nearest to you. If the Dow figure for such a location is attractive, consult an architect to see what he can do for you.

Incidentally, the figures given here do not include land, landscaping, unusual foundation conditions due to topography or soil, furnishings, or the architect's design and supervision fees, but cover the costs of the construction of the house itself, and the basic equipment.

ECORD HOUSES 1963 COMPARATIVE BUILDING COSTS* FOR SELECTED CITIES

Prepared by Dow Building Cost Calculator and valuation guide, an F. W. Dodge Corporation service

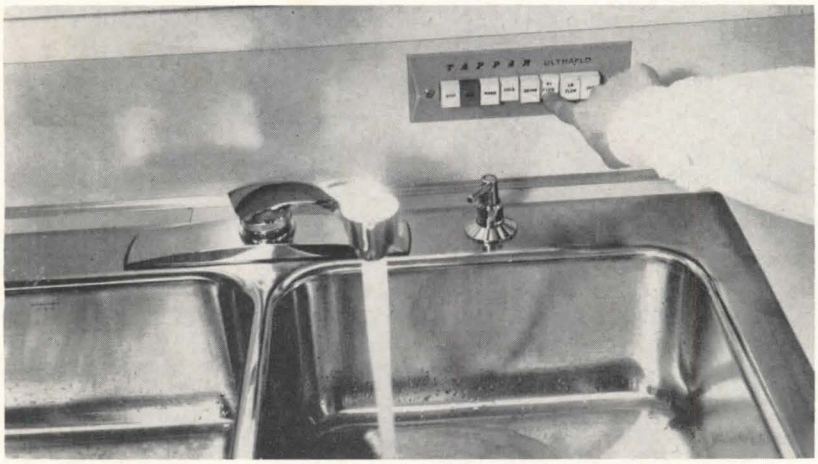
ME OF HOUSE IERE BUILT	House in Tahoe Keys, Calif. (58)	Bolton House, Houston, Tex. (62)	House in Lakewood, N. J. (114)	Heller House, Highland Park, Ill. (106)	House in Yorktown Heights, N. Y. (126)	Jones House, Del Mar, Calif. (86)	Lehrecke House, Tappan, N. Y. (102)	House in Atlantic Beach, Fla. (94)	Weeks House, Seattle, Wash. (74)	Blanche Hill House, Honolulu, Hawaii (54)	Milam House, St. John's County, Fla. (70)	House in Palm Springs, Calif. (82)
NSTRUCTION COST*	$45,000	$45,000	$25,000	$95,000	$28,000	$30,000	$28,000	$15,867	$39,000	$100,000	$88,074	$14,000
ST TO BUILD IN												
'LANTA, GA.	37,700	39,900	22,100	76,200	22,400	25,700	22,100	15,000	32,800	67,100	83,100	11,900
.LTIMORE, MD.	42,300	44,900	24,800	85,600	25,200	28,900	24,800	16,900	36,800	75,400	93,400	13,400
)STON, MASS.	44,600	47,300	26,100	90,200	26,500	30,500	26,100	17,800	38,800	79,400	98,300	14,100
IICAGO, ILL.	46,500	49,300	27,200	94,100	27,700	31,800	27,200	18,600	40,500	82,900	102,700	14,700
EVELAND, OHIO	49,000	52,000	28,700	99,200	29,200	33,500	28,700	19,600	42,700	87,400	108,200	15,500
.LLAS, TEX.	41,500	44,000	24,300	83,800	24,700	28,300	24,300	16,500	36,100	73,900	91,400	13,100
NVER, COLO.	43,800	46,500	25,700	88,600	26,100	30,000	25,700	17,500	38,100	78,100	96,700	13,900
NSAS CITY, MO.	44,100	46,700	25,800	89,100	26,200	30,100	25,800	17,600	38,400	78,500	97,200	13,900
S ANGELES, CAL.	44,300	47,000	25,900	89,600	25,400	30,300	25,900	17,700	38,600	78,900	97,700	14,000
AMI, FLA.	44,300	47,000	26,000	89,700	26,400	30,300	26,000	17,700	38,600	79,000	97,800	14,000
W YORK, N. Y.	52,900	56,100	31,000	107,000	31,500	36,200	31,000	21,100	46,100	94,300	116,700	16,700
TSBURGH, PA.	48,200	51,100	28,200	97,400	28,700	32,900	28,200	19,200	41,900	85,900	106,300	15,200
N FRANCISCO, CALIF.	45,000	47,700	25,400	91,100	26,800	30,800	26,400	18,000	39,200	80,200	99,300	14,200
ATTLE, WASH.	44,800	47,500	26,300	90,700	26,700	30,600	26,300	17,900	39,000	79,900	98,900	14,200

s land, landscaping, special foundations, ctural design and supervision fees.

Dow Building Cost Calculator and Valuation Guide is used widely ghout the United States and Canada. Its objective is to show eplacement costs for more than 650 building types with counter- almost everywhere. The costs are revised and supplemented at vals keeping them in balance with changing prices for building materials and wage rates for building trades craftsmen. Dow building costs data is generally recognized by courts as authoritative and is used by real estate tax assessors, fire insurance valuation engineers, real estate appraisers, mortgage loan officers in financial institutions, architects, builders and a broad list of governmental agencies—Federal, state, county and municipal.

New Products for the House

Reviews of some of the new products introduced in the last year are given here and on following pages



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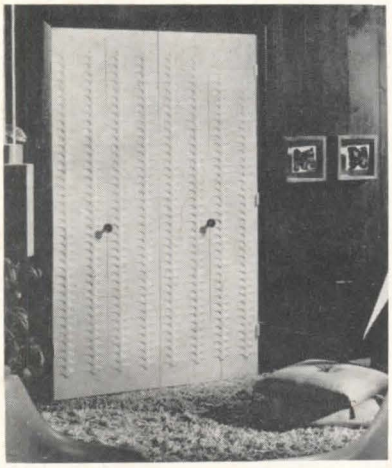

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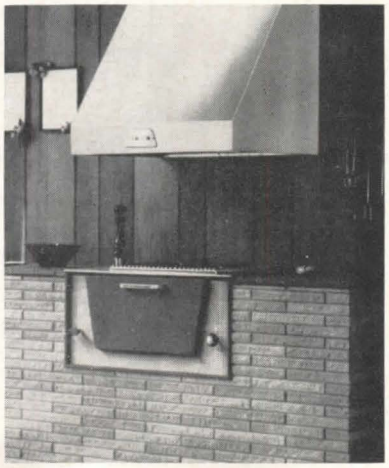

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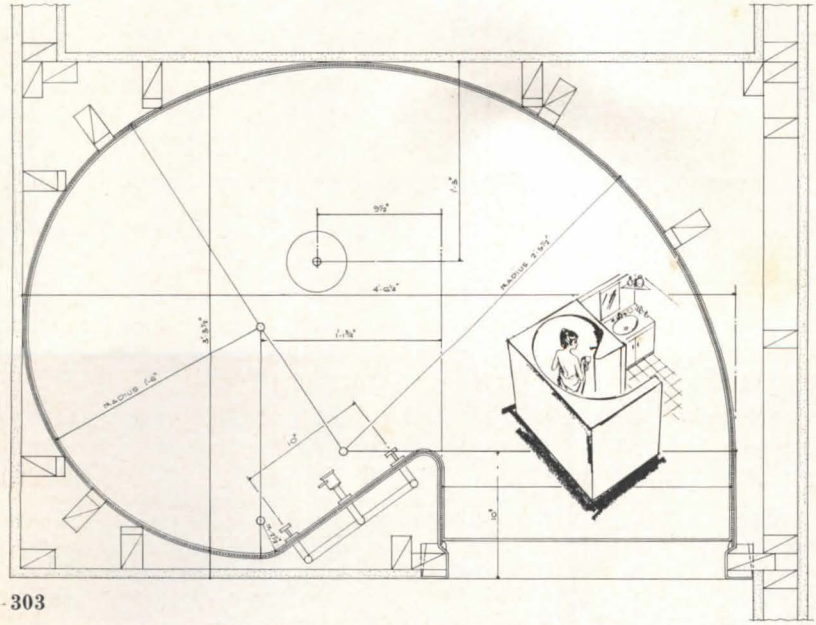


303

PUSH BUTTON WATER
Push buttons release mixtures of h
and cold water at pre-set temper
tures and pressures. A bank of so
noid valves centrally located at t
water source controls the syste
The Tappan Co., Mansfield, Ohio
CIRCLE 300 ON INQUIRY CA

PRE-HUNG FOLDING DOORS
Four decorative patterns are offer
for the *Homestead* pre-hung foldi
door which opens flat against t
wall to give full access to the spa
behind. The door is pre-hung on
painted aluminum frame, packag
as one unit. The surface is a rig
paintable polymer. Hardware is p
adjusted at the factory. *Americ*
Screen Products Co., Chatsworth,
CIRCLE 301 ON INQUIRY CA

INDOOR/OUTDOOR BARBECUE GRILL
Char-Grill barbecue grill feature
stainless steel hood with two-secti
door for more efficient cooking a
smoke flavoring both indoors and o
doors. Outer surfaces are enam
The Majestic Co., Inc., Huntingt
Indiana
CIRCLE 302 ON INQUIRY CA

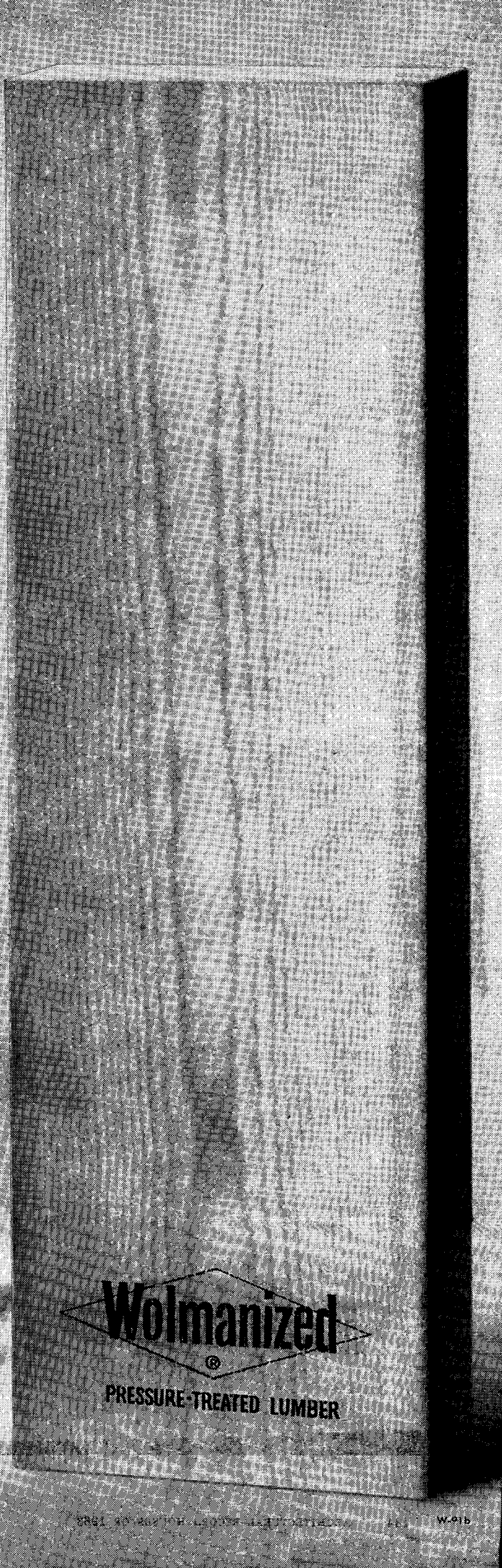
OPEN SHOWER GIVES PRIVA
A curved shower room of mol
fiberglass has no door, yet the sh
er area is completely private. The
tire unit takes a floor area 4 ft
in. long and 3 ft 4½ in. wide.
plastic base has a non-skid saf
surface. The top is a duplicate of
base, so the unit can be assemb
with either a right or left hand
trance. It is available in four col
Swan Enterprises Inc., 283 Gre
wich Ave., Greenwich, Conn.
CIRCLE 303 ON INQUIRY C

more products on page

For more information . .
circle the key numbers of th
products on which you wan
more information (see numbe
below each product item) o
the Inquiry Card, pages 155
156.

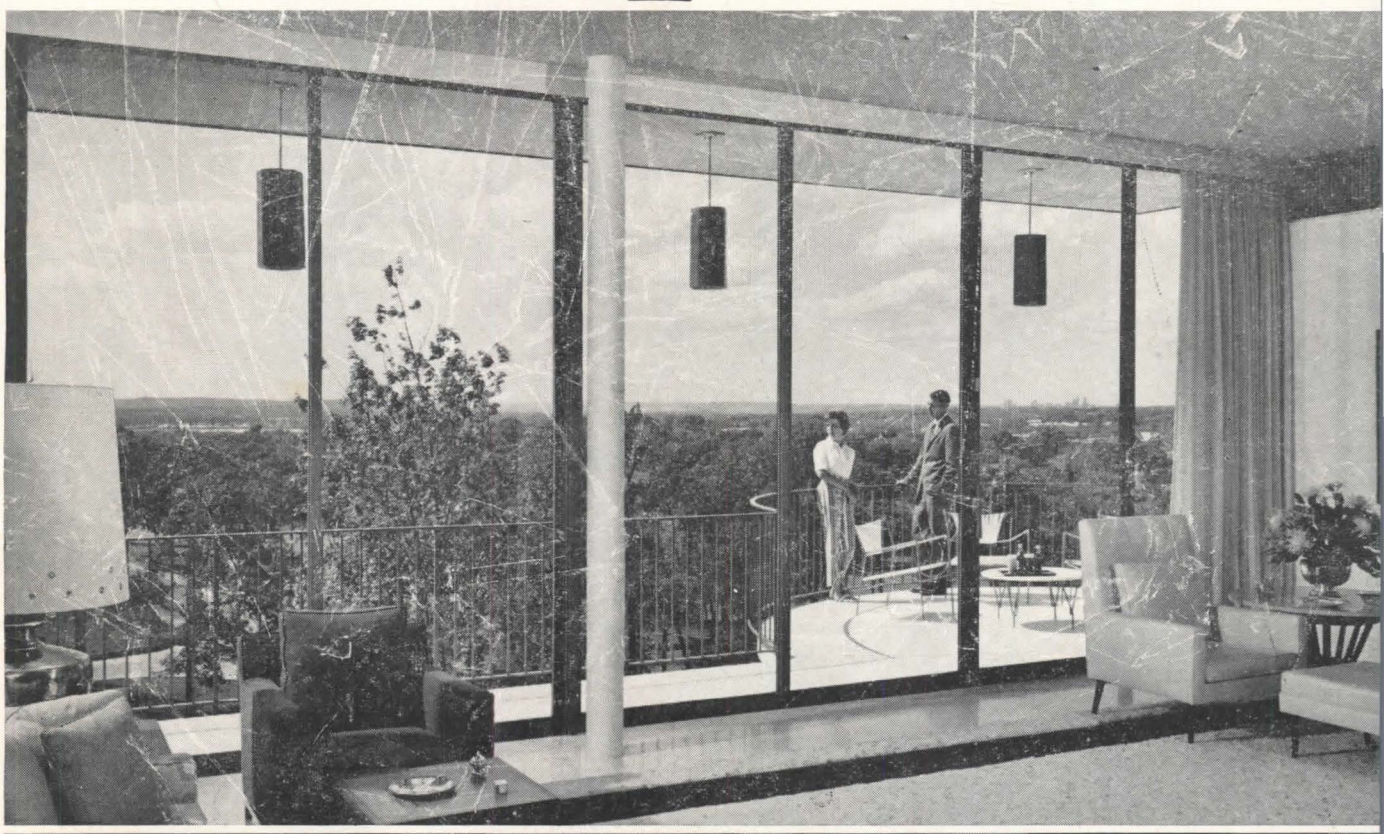
eadly Enemies . . . Wolmanized pressure-treated lumber
termites. Wolman® wood preservative salts—impregnated deep in the
cells—form a permanent roadblock to invading termites and decay.
for them. Good news for you. Wolmanized lumber is one of the best
ng points you can present a homeseeker. What's more, it's as work-
as untreated wood, clean and odorless, paintable, non-corrosive to
al. Need more incentive? Consider this: Wolmanized lumber is a
duct of Koppers research—exhaustive technological probing which has
ed Koppers Company achieve dramatic accomplishments in the
nce of wood preserving. Be wise. Specify Wolmanized pressure-
ted lumber for your next job.
e for brochure "Safeguard Building Dollars." Wolman Preservative
t., Koppers Company, Inc., 751 Koppers Building, Pittsburgh 19, Pa.

Wolmanized®
PRESSURE-TREATED LUMBER



W-91b

This is Open World



...L·O·F glass makes it as practical as it is pleasurable

·F makes special kinds of glass to help solve special house-sign problems. Your L·O·F Distributor knows glass and how to use Try him. Or call your nearest Libbey·Owens·Ford District Office. th are listed under "Glass" in the phone book Yellow Pages.

O REDUCE SUN GLARE and heat, *arallel-O-Grey®* plate glass excludes pproximately 50% of natural daylight nd 40% of solar heat. Residence in ulsa, Oklahoma. Architects: O'Neil ord & Associates, San Antonio, Texas.

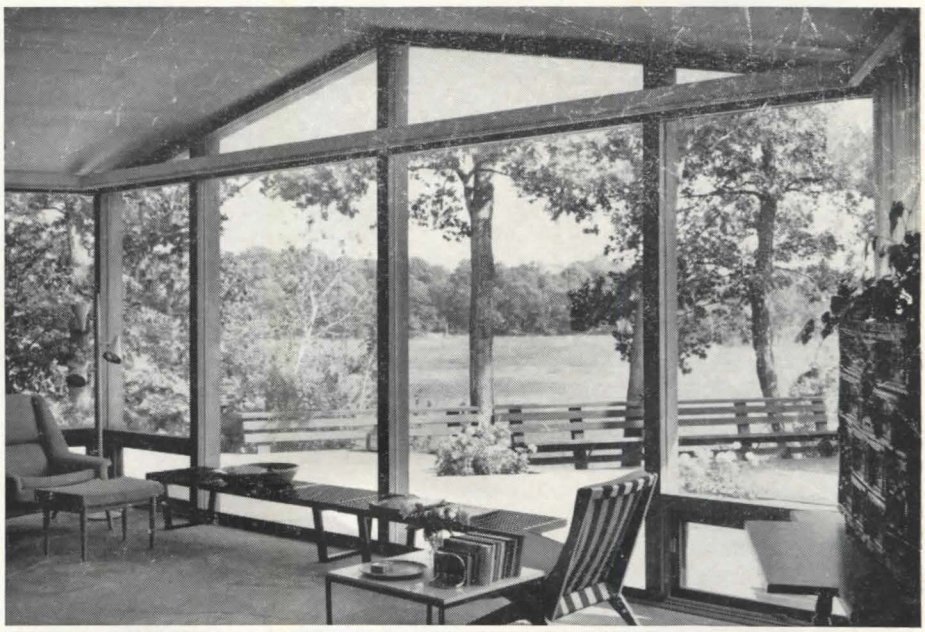
ASSURE YEAR-ROUND COMFORT ▶ reduce heating and air-conditioning ts, use *Thermopane®* insulating glass. hitects: Elizabeth and Winston Close, neapolis, Minnesota.

OR BEST VISIBILITY, clear *Parallel-Plate®* glass is twin ground to remove urface waviness that could cause dis-ortion. William Matera residence in an Antonio, Texas. Architect: Phil loyd Shoop, San Antonio.

KEEP INTERIORS COOLER, L·O·F ▶ t Absorbing plate glass (pale blue-green olor) excludes more than 40% of the 's radiant energy, yet transmits 75% of light. Home of Sen. Barry Goldwater. hitect: Paul Yeager, Phoenix, Arizona.

bbey·Owens·Ford
TOLEDO 2, OHIO

MADE IN U.S.A.
L O F GLASS
THE QUALITY MARK TO LOOK FOR



For more data, circle 36 on Inquiry Card

"By switching to hydronic heating, with Coppe the same time, offer home owners a heatin

Says "NICK" GUTTMAN, *President*,
NH BUILDING CORPORATION, NEW CITY,
NEW YORK.

"The first two homes that my partner, Harry Degenshein and myself, put up had forced hot air heat with summer air conditioning. After listening to the comments of some of the prospective home owners, regarding the heating system, we decided to investigate hydronic heating more thoroughly. The result was that in these homes priced from $29,500 up, we are able to give prospective home owners a basic hydronic baseboard heating system with two-zone temperature control, heated bathtub, and instant hot water at the faucet for $500 less than a warm air system with summer air conditioning.

"To look at it another way, this superior hydronic heating system costs only $120 more per home than an ordinary warm air system without air conditioning.

"So, no matter which way you approach it, we are able to offer our clients much better value for their money.

"In addition, by using hydronic heating, we are also able to offer such items as a snow melting system in the driveway, heated greenhouse, and heated swimming pool, which cost would be prohibitive if the basic heating system were not hydronic. Also, being able to offer these extras, we know that our sales job will be made easier.

"And, of course, we wouldn't think of using anything but copper water tube in our hydronic systems, for it is the mark of a quality home, which the public accepts with complete confidence," concluded Mr. Guttman.

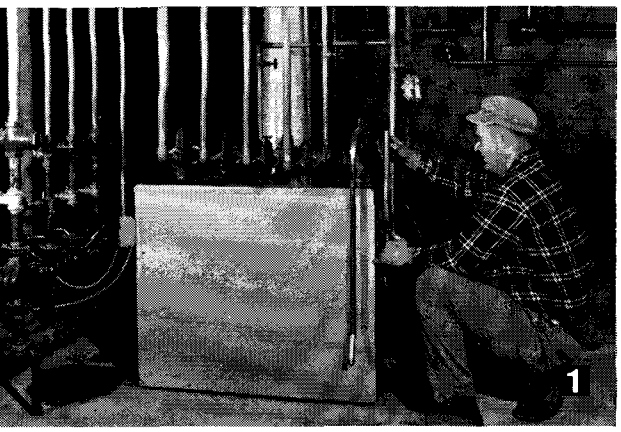
Why don't you take advantage of the many money saving opportunities to be realized by the use of hydronic heating and Revere Copper Water Tube? Should you have installation problems, call your Revere distributor and he'll be glad to put you in touch with Revere's Technical Advisory Service.

INSTALL A REVERE SNOW MELTING SYSTEM TO HELP SELL YOUR HOMES

Send, today, for free brochure on how to install a Residential Snow Melting System. You will also receive a free companion piece on proved and tested installation techniques used in commercial projects. Write: Dept. "S-M" at address below.

REVERE
COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1801
230 Park Ave., New York 17, N. Y.
Offices in Principal Cities. Distributors Everywhere.

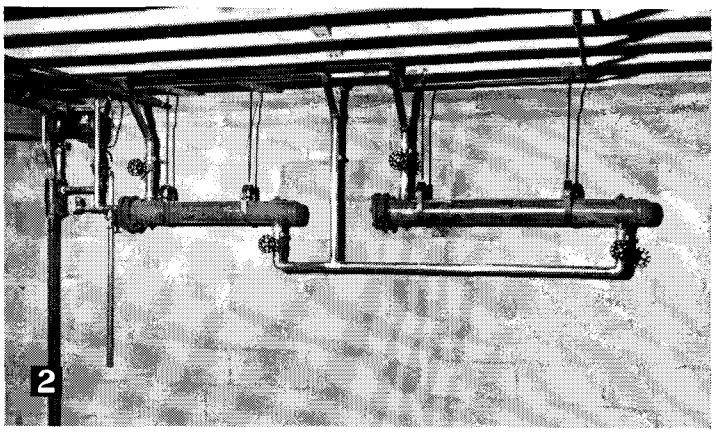
For more data, circle 38 on Inquiry Card

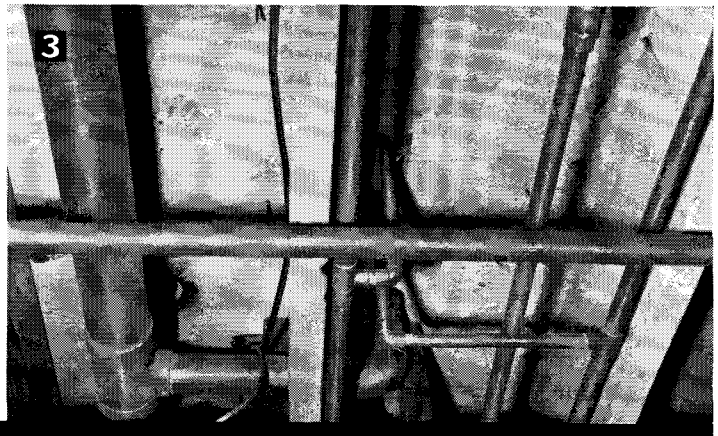


THIS BOILER has a rating of 180,000 BTU, which will take care of heating the house, garage, providing instant hot water at the faucet, heating the driveway snow melting system, greenhouse, and water in the swimming pool. It also provides for an entire third bath if needed at a later date.

HEAT EXCHANGER at left is used in connection with the Revere snow melting system which circulates a solution of ethylene glycol anti-freeze and water. The heat exchanger shown at right is for the swimming pool.

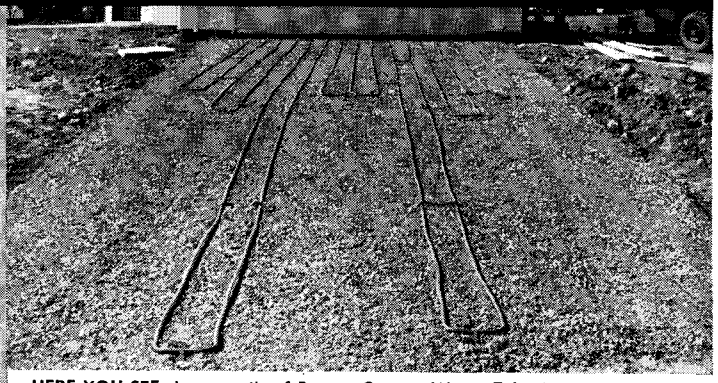
THIS IS WHERE Revere Copper Water Tube really shines—in the tight spots where there is room only for solder fittings and a blowtorch. Plumbing and Heating Contractor, T H M Plumbing and Heating Company, Incorporated, Emerson, N. J. These are over 5,500 feet of Revere Copper Water Tube in sizes of ⅜" to 3".





Water Tube, we SAVE $500 A HOME and, at system of much greater flexibility and efficiency,"

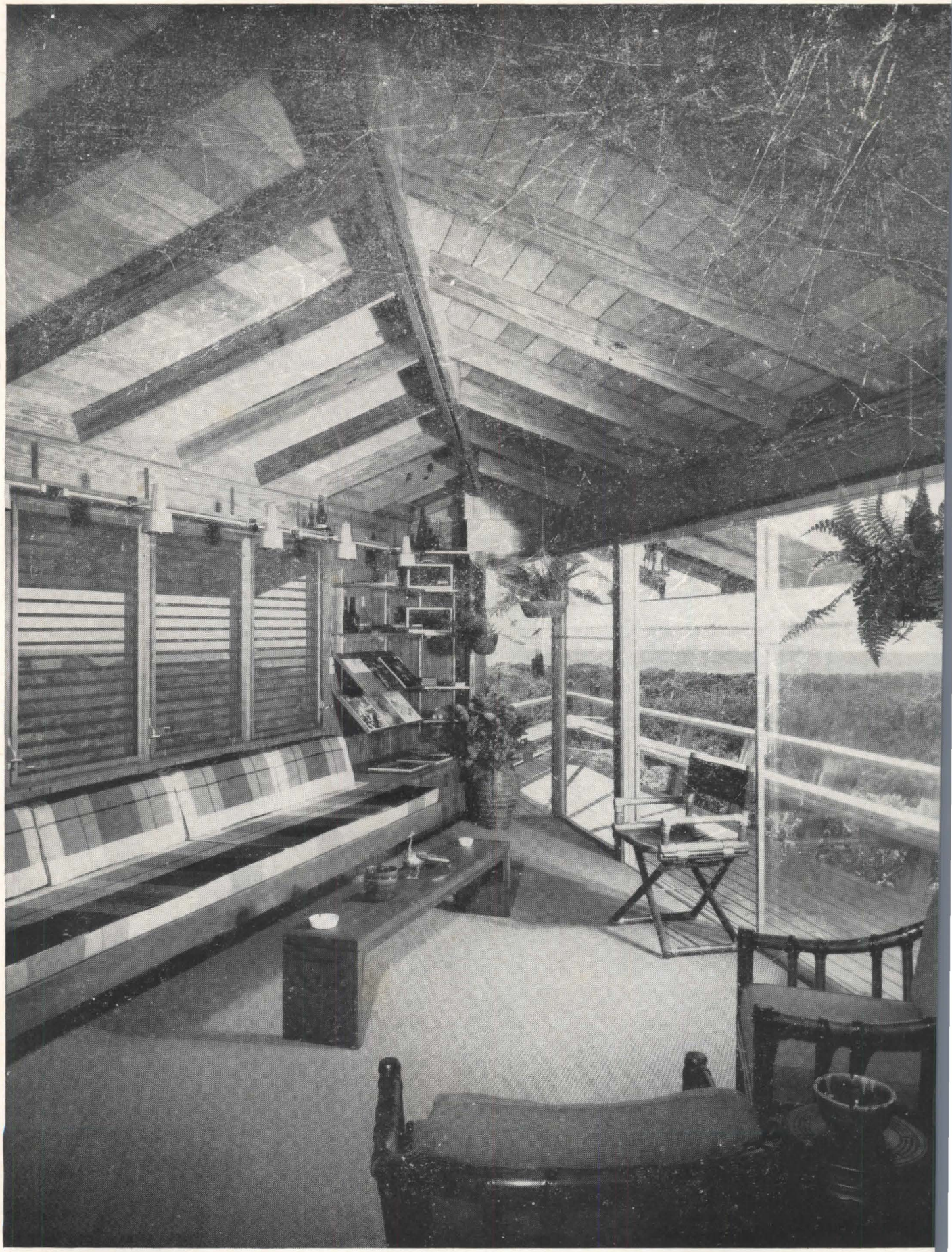
IIS IS FIRST OF 172 hydronic homes to be erected on ½ acre plots New City, Rockland County, New York.



HERE YOU SEE sinuous coils of Revere Copper Water Tube laid on top of the crushed stone in driveway prior to applying the black top.

IISH-ROLLING the black top. Note how embedded Revere Copper ater Tube readily withstands the weight of this large roller.

CONTROLS FOR THE Revere driveway snow melting system are located conveniently in a corner of the garage.



A vacation hideaway in the Bahamas uses wood converging beams and rough-sawn cei
to work wonders in its very livable, triangular living room. Note the complementing w
built-ins designed by The Richard Plumer Company, Miami, for this Frazer Hog Cay cott

New Products

continued from page 132

GLASS FIBER AND PLASTIC PANELS

A 20-year guarantee covers structural integrity, color fastness and weather resistance of Alsynite's *Superglaze* panels. The panels are made with a fiber-glass reinforcing core sandwiched between two surface mats of monofilament fiber-glass. All three plies fuse when saturated with special acrylic resins. They are made in a variety of sizes and colors. *Alsynite Div., Reich Chemicals, Inc., White Plains, N.Y.*

CIRCLE 304 ON INQUIRY C

LIGHTWEIGHT PACKAGED SHOWER

Pilot Plus shower cabinet comes complete and ready to stall. It features a new *Molded Stone* floor, a combina of concrete and resins. *Fiat Metal Mfg. Co., Inc., Pl view, L.I., N.Y.*

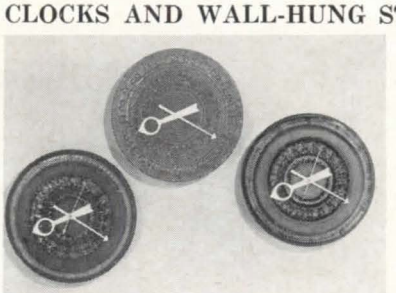
CIRCLE 305 ON INQUIRY C

PLASTIC-SURFACED PLYWOOD SIDING

Prefinished plywood siding surfaced with DuPont's *lar* polyvinyl fluoride film comes with a guarantee tha won't need painting for a minimum of 15 years. W gray, green and yellow are colors available. *U.S. Ply Corp., 55 West 44th St., New York 36, N.Y.*

CIRCLE 306 ON INQUIRY C

CLOCKS AND WALL-HUNG STORAGE CHESTS



New designs in cl feature disks of in rich ceramic gl A collection of hung storage c is made of h rubbed walnut, largest of whic only 30 by 20 by

Howard Miller Clock Co., Zeeland, Mich.

CIRCLE 307 ON INQUIRY C

VINYL-COATED WOVEN WALL FABRIC

Vinyl-coated *Fabricraft* woven wall covering is a ra textured fabric available in eight colors. It can be inst without special wall preparation. *Deltox, Inc., Osh Wis.*

CIRCLE 308 ON INQUIRY C

REDWOOD FURNITURE FOR INDOORS AND

Redwood furniture, designed for use both indoors and doors, includes tables, chairs and lamps. All redwo kiln-dried, with table and seat tops finished with a urethane coating which lets wood graining show through while providing resistance to water, alcohol, etc. Other wood parts are treated with a water-repellent wood preservative. *Recreation Designs, Inc., Berwyn, Pa.*

CIRCLE 309 ON INQUIRY CARD

ÞOM AIR CONDITIONERS

ıcette room air ditioners are only 4 in. wide, so they be installed in row or casement ıdows. The *Speedy-ınt* series, rang- in capacities from 00 to 10,800 btuh, e a pre-assembled ınting unit which uires no screws. All room air conditioners are perform- e tested and have permanent foam filters which can be shed or vacuum cleaned. *Kelvinator Div., American tors Corp., Detroit 32, Mich.*

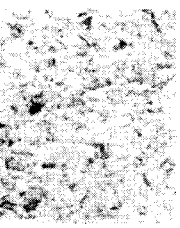
CIRCLE 310 ON INQUIRY CARD

STANT HOT AND COLD WATER

t and cold water is dispensed instantly from *Quick-np*, a built-in appliance which fits under kitchen coun- and requires a space only 8½ in. wide and 25½ in. h. *Rangaire Corp., Robert Mfg. Div., Cleburne, Tex.*

CIRCLE 311 ON INQUIRY CARD

NYL ASBESTOS TILE



Fine chips of marble in textured translucent vinyl are incorporated in vinyl asbestos tile to give a textured surface and terrazzo-like pattern. The chips are deeply imbedded in the tile for longer life and greater wear-resistance. *Azrock Floor Products Div., Uvalde Rock As-lt Co., P.O. Box 531, San Antonio 6, Tex.*

CIRCLE 312 ON INQUIRY CARD

OCK WOOD FOLDING DOORS

ıelfold wood folding doors are now available in two ghts, in widths up to 6 ft. Dual-wall vinyl hinges assure et operation and even alignment of panels. *Panelfold ducts, Hialeah, Fla.*

CIRCLE 313 ON INQUIRY CARD

LDING ENCLOSURE FOR BATHTUBS

stic panels fold against walls at each end of tub to give access for cleaning or for bathing children. *Tub-Mas- Corp., 409 Virginia Dr., Orlando, Fla.*

CIRCLE 314 ON INQUIRY CARD

UMINUM SHINGLES WITH WOOD EFFECT

ıent Lock-Line aluminum ıgles are striated to give a ɔd grain effect on the roof. The els are 10 ft long and 12 in. e, with a ⅝ in. butt thickness give a shadow line similar to den shakes. The panels are ed into position with inter- ing construction so each ıgle is locked to the one above the one below for weather ıtness. *Consolidated General ducts, Houston 6, Tex.*

IRCLE 315 ON INQUIRY CARD

more products on page 146

What keeps homebuyers smiling

WINTER

...AND SUMMER?

MUELLER CLIMATROL HEATING AND AIR CONDITIONING!

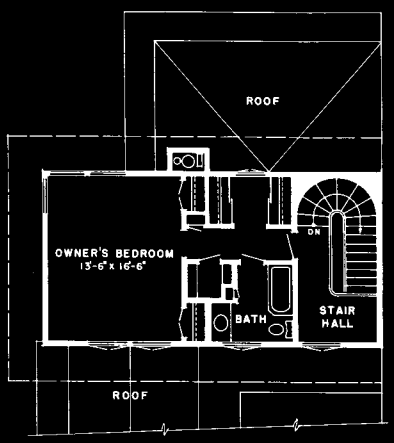
Look at the record: even though so many other brands are cutting quality in order to cut price, Mueller Climatrol heating and air conditioning units are growing more popular every year. Why? Because of the growing demand for better quality in today's homes. ■ Today's homebuyer is far more quality conscious. He buys *value*, not price alone. Smart home planners are cashing in on this trend by insisting on Mueller Climatrol quality — famous for over 100 years. Quality that stops call-backs. Quality backed by a nationwide network of conscientious dealers. Quality that makes satisfied customers our best ads. ■ You name it: boilers or warm air; oil, gas, or electric; whole-home package or remote air conditioning; heat pumps or humidity-control . . . we've got it. Write direct for details.

Mueller Climatrol®
DIVISION OF WORTHINGTON

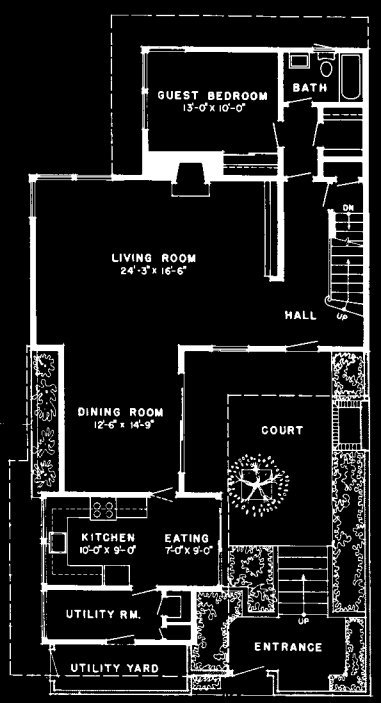
2058 W. OKLAHOMA AVE., MILWAUKEE, WISCONSIN
ALHAMBRA, CALIFORNIA / PLAINFIELD, NEW JERSEY

MC-160

For more data, circle 43 on Inquiry Card



SECOND FLOOR PLAN



MAIN FLOOR PLAN

Residence: San Francisco, California

Architects: Wurster, Bernardi & Emmons

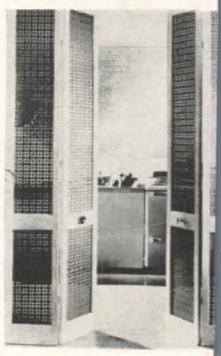
Beauty comes naturally to Red Cedar Shingles

his is a versatile material, one that adapts itself to many oods. Warm color, interesting texture, strong line are ly part of the value of Red Cedar Shingles. They're also gged, long-lasting, maintenance free, and they offer od insulation. Best of all, Cedar Shingles age gracefully, gaining beauty and character with the years. For further information about specifications and application, write, wire or call: Red Cedar Shingle Bureau, 5510 White Building, Seattle 1, Washington. (In Canada: 550 Burrard Street, Vancouver 1, B.C.) **RED CEDAR SHINGLES**

New Products

continued from page 141

BI-FOLD DOORS WITH FILIGREE PANELS



Panelaire Decora bi-fold doors have sculptured filigree insert panels, available in two patterns. The doors are made of 1⅛-in.-thick white pine with insert panels made of durable silicon-impregnated hardboard. The doors are made in four widths and two heights, adaptable for use in various locations. *Panelboard Mfg. Co., Inc., Newark 14, N.J.*

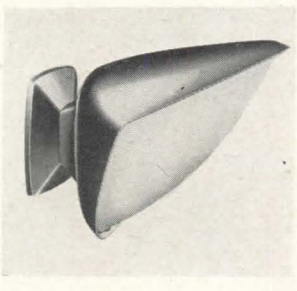
CIRCLE 316 ON INQUIRY CARD

LOCKSET SYSTEM

Protectokey lockset system has four tiny steel balls whi drop into a blind opening in the cylinder when the ho owner first uses his personal key to his new house. The p tumbler combination is thus changed so the master ke used during construction no longer can open the lo *Kwikset Div., The American Hardware Corp., 516 Santa Ana St., Anaheim, Calif.*

CIRCLE 317 ON INQUIRY CA

LOW-COST FLOODLIGHT FOR HOMES



A low-cost floodlight lum aire specially designed for r idences uses an incandesce lamp of 150-watts or less. can be mounted on a post t wall or pipe. *Westinghou Electric Corp., Lighting D Edgewater Park, Clevela Ohio*

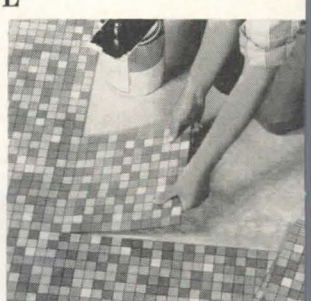
CIRCLE 318 ON INQUIRY CA

AUTOMATIC LAWN SPRINKLING

An automated electronic master station controller offer flexible 14-day lawn watering cycle. Switches can be for any schedule and the sprinklers will go on for long short periods. Weatherproof housing for the station is c rosion-resistant and has an attached cover to prevent ta pering. *Rain Bird Sales, Box 547, Azusa, Calif.*

CIRCLE 319 ON INQUIRY CA

CERAMIC TILE IN VINYL

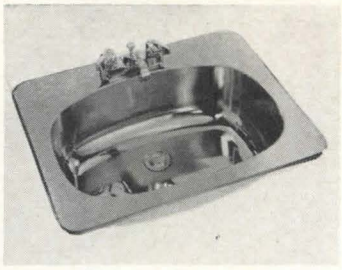


One-in.-square ceramic tiles are grouted and underlaid with vinyl to provide a resilient, easy-to-maintain flooring, which can be installed above or below grade. All the color in the *Vinylbond Ceramic Tile* is in the ceramic, so there is no danger of fading. The tile is available in 12-in. vinyl squares containing 144 ceramic tiles. *Sty Corp., Milford, Mass.*

CIRCLE 320 ON INQUIRY CA

AINLESS STEEL VANITY TOP SINKS

o new vanity top sinks ne round, the other angular—are made of nless steel with a mir- finish and are self- med for ease of in- lation in vanity count- *Jensen-Thorsen Corp., lison, Ill.*



CIRCLE 321 ON INQUIRY CARD

CKAGED GLASS FIBER CEILING PANELS

kaged wall-to-wall ceiling kits contain *Filite* smooth corrugated glass fiber luminous panels, anodized alu- um grid and lighting fixtures. *Artcrest Products Co., , 255 W. 79th St., Chicago 20, Ill.*

CIRCLE 322 ON INQUIRY CARD

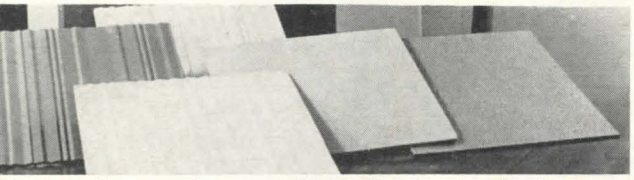
UMINUM SCREENING

screen woven aluminum mesh for screening doors and dows reduces sun penetration by as much as 78 per t. Because of the woven construction it is strong, but s not spoil either view or ventilation. The material han- s as easily as wire cloth. *Phifer Wire Products, Tusca- sa, Ala.*

CIRCLE 323 ON INQUIRY CARD

ASTIC-COATED PANELS

d Bond prefinished asbestos-cement panels are now ilable with a *Plasti-Clad* baked-on coating of heavy vinyl chloride. The panels have either a pebble-like or



ated surface, and are available in six standard colors. *ional Gypsum Co., Buffalo 2, N.Y.*

CIRCLE 324 ON INQUIRY CARD

BRIC WALL COVERING

aweve wall covering fabrics have designs woven in, printed. Made with Dow Chemical's *Rovana* yarn, the ric is available in solid colors, damask patterns, tex- s and stripes. Color-matched drapery fabrics are also le. The fabrics are fire- and mildew-resistant and color- . *C. W. Stockwell Co., 3262 Wilshire Blvd., Los Angeles Calif.*

CIRCLE 325 ON INQUIRY CARD

VOLVING SHELVES FOR CORNER

er-Susan is a pie-cut re- ing shelf mechanism for ier cabinets. It is a stack- nit which occupies a 3-ft- rea. The shelves are 32 in. iameter and do not have a er post. Shelves are sup- ed by a sectional steel ne which is bolted together on the job. *Murray Equip- t Co., York, Pa.*

CIRCLE 326 ON INQUIRY CARD

more products on page 150

Millions of reasons why an architect should care about electronic air cleaning

There may be 100 to 500 million reasons in every cubic foot of city air. They're the tiny particles of dust, pollen, smoke, soot, grease and industrial wastes that can make a home dirty, unpleasant—even unhealthy to live in. And, no matter how beautifully it is conceived, the true test of the home you design is the degree of living comfort it ultimately affords your client.

Clean air is as important as temperature, humidity, and air motion. It is now a controllable factor, practical in today's modern home. As air pollution becomes a bigger problem, clean air becomes a valuable commodity. Now you can get it for your clients by the houseful when you specify a Honeywell Electronic Air Cleaner. Two-stage electrostatic precipitation, the principal used in both the Honeywell "whole-house" and portable units is today's most suitable method available for high-efficiency, residential air cleaning.

The compact "whole-house" central unit fits in the return air duct of any forced air heating or cooling system, and removes up to 95%* of all airborne dust, pollen and other particles passing through it. It can trap particles as small as .03 microns by actual test. (Tobacco smoke particles fall in this class.)

By comparison, ordinary furnace filters, as you may know, are only about 5% to 8%* efficient. Generally, they can only catch particles that measure 5 microns or larger. They miss most of the great quantity of particles less than 5 microns that do much of the real soiling damage . . . cause the bulk of the real work.

As you know, your clients care a great deal about the appearance of their home. And, they care about a clean, fresh, comfortable indoor climate. They know that airborne particles, such as soot, smoke, dust, pollen, etc. cause discomfort, dusting, dulled mirrors, dingy curtains, windows and glassware, and "ghosts" behind pictures.

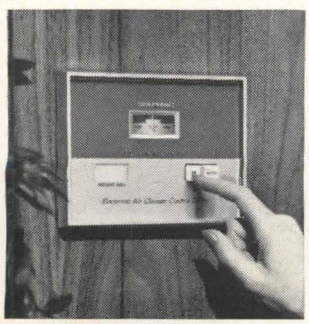
They'll notice the difference. They'll breathe air that's purer. Mirrors and windows will stay cleaner, longer. So will walls and furnishings. They'll save on cleaning bills. And they'll thank you for it.

Can be included with the mortgage on a new home for as little as $1.50 per month. Or, in an existing home on a 3 year FHA Title I plan, it costs as little as $14.38 a month, installed.

Look into it. Why not find out more about the benefits of residential use of the same type of air filtering system that has been used for years in hospitals and commercial buildings. Just clip and mail the coupon for our special architect's brochure on electronic air cleaning: A PLAN FOR THE SELF-CLEANING HOME (AIA file no. 30-D-3.) You'll receive complete information and specifications on both the "whole-house" and portable unit. Get *all* the facts on air cleaning. You'll be better prepared to give your clients advice on this newest crowning touch to their custom home — Honeywell Electronic Air Cleaning.

FIRST IN CONTROL

**As measured by the National Bureau of Standards Dust Spot Method*



Handsome panel in living area shows cleaner efficiency. Signals when unit needs cleaning.

Easily installed in the duct work of new or established homes with forced air systems.

Honeywell

MAIL TO:
Honeywell, Dept. RH5-109
Minneapolis 8, Minnesota

Send me your folder, PLAN FOR THE SELF-CLEANING HOME

Name_____

Address_____

City_____ Zone_____ State_____

For more data, circle 49 on Inquiry Card

For more data, circle 51 on Inquiry

Dark

for distinction

There's dramatic appeal in the dark finish of Bruce Fireside Plank . . . a low-cost solid oak floor with charm for any home. Alternating 2¼″ and 3¼″ strips create the interesting plank effect that is accentuated by wide but shallow side bevels. Bruce Fireside Plank is completely finished at the factory for beauty, durability, and on-the-job cost savings. Write for color booklet. See our catalog in Sweet's Files.

E. L. BRUCE CO. Incorporated
Memphis 1, Tennessee

BRUCE

Bruce

Fireside Plank Floor

Naturally Beautiful

Furniture by Knoll Associates, Inc.
Photo by Hedrich-Blessing

New Products

continued from page 147

QUIET AUTOMATIC DISHWASHER

A new split washing action, a new inlet valve and sound-insulation of the cabinet help make Model 24KW36 automatic dishwasher quiet operating. Dishes in lower rack are deluged by water driven by an impeller blade. Upper rack gets a high-pressure needle spray which assures thorough cleaning of glasses and bowls. *Philco Corp., Tioga & C Sts., Philadelphia 34, Pa.*

CIRCLE 327 ON INQUIRY CARD

PLASTIC-SURFACED ALUMINUM SIDING

A 30-year guarantee is given on *Premium 30* aluminum siding, which is surfaced with DuPont's *Tedlar* polyvinyl fluoride film. It is available in white, green and gray. *Alsco Inc., 225 Forge St., Akron 8, Ohio*

CIRCLE 328 ON INQUIRY CARD

ELECTRIC LANTERN SIMULATES GASLIGHT

Jacob's Lantern is an electric post light made of heavy-gage copper, designed to resemble gas lanterns. *Jacobsen Products, Inc., 107 Capital Ave., Pittsburgh 26, Pa.*

CIRCLE 329 ON INQUIRY CARD

THREE-RINGED SHOWER HEAD

Three concentric circles of spray in a new shower he provide both a feeling of luxury and a firm method of c trol, regardless of changes in water pressure. The ca operated spray control has smooth action from nee spray to flood flow. *Symmons Engineering Co., 445 C Boston 16, Mass.*

CIRCLE 330 ON INQUIRY CA

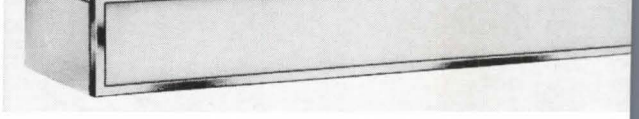
TEXTURED SHEET VINYL FLOORING

A textured sheet vinyl flooring for installation on or ab grade retails at $3.50 to $4.00 a sq yd. The textured vi is available in three design series, and also in 1-ft-sq ti *Flooring Div., Goodyear Tire and Rubber Co., Akron, O*

CIRCLE 331 ON INQUIRY CA

INCANDESCENT BATHROOM FIXTURES

Incandescent bathroom fixtures with frosted diffusers stainless steel trim are made in five models, in leng from 24 to 48 in., holding up to six 60-watt bulbs.



three-directional fixtures illuminate cabinet, person rest of room. *Grote Mfg. Co., Madison, Ind.*

CIRCLE 332 ON INQUIRY C

more products on page

NO. 4100 ELONGATED
SILHOUETTE ONE-PIECE CLOSE

The new look of luxury in the new elongated *Silhouette*

Elegant! Elongated! Exquisite! It's from Case—quieter by far with the famous Case Whispering Flush. Low silhouette—the famous Case design that's so popular and so low in cost. Just $123.95*! Yet, what features—positively will not overflow, flushes with only 14 quarts of water, operates on as little as 15 pounds of pressure. It uses a jet pump principle to obtain a more efficient rim flush. And what a choice of colors—a fantastic 50 in all, plus sparkling black. Want to know more? Turn the page to see how the moderately priced Elongated Case Silhouette fits so many of your installations. Next step, contact Case.
*Suggested consumer price in white.

Also available in No. 4000 round front silhouette one-piece

Case
SINCE 1853

CASE MANUFACTURING / DIVISION OF OGDEN CORPORATION / ROBINSON, ILLINOIS

What you should know about the Case *Silhouette*

If you're an architect or specifying engineer... you will be interested in the fact that the bowl rim of the Silhouette is only 14″ from the floor. Overall height is 19½″, and the elongated closet extends only 27¼″ into the bathroom. You will also appreciate the noticeable lack of bulk, plus the contoured tank and sculptured base.

You can specify the Silhouette for high-rise buildings with no worries about minimum pressure. It operates satisfactorily on as little as 15 pounds of pressure or more than 150. What's more it meets all anti-syphon requirements—even the most rigid plumbing codes.

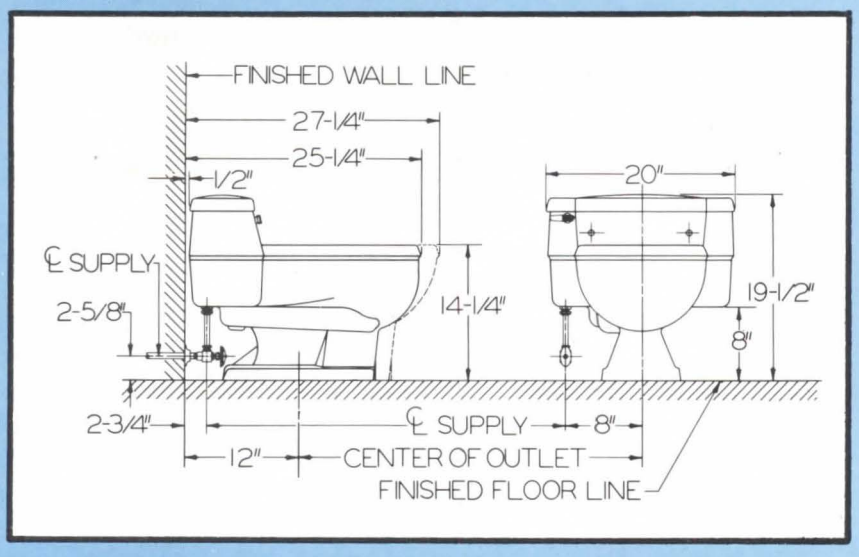
A tailored seat is another luxury Silhouette feature. Made of high impact polystyrene, it has a 10½″ spread between posts which gives it a firm mounting. A free-standing check hinge is also included.

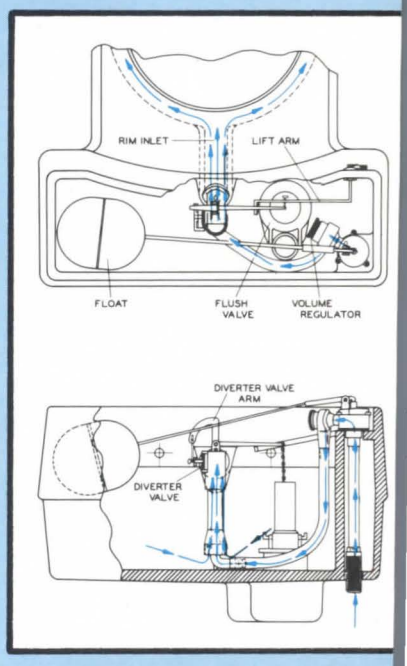
If you're a builder or homeowner . . . you wil recognize the importance of the Case "Whispering Flush." It is so quiet you never have to worry about a disturbing flushing noise—no matter where the bathroom is located.

As quiet as the flush is it's hard to imagine it could also b extremely efficient. But take a look at the drawing below It shows how the Silhouette uses a jet pump principle t aspirate tank water and supply twice the usual amount o water for a strong, cleansing rim flush.

You will also appreciate the fact that the Silhouette pos tively will not overflow the bowl—even if the trapway completely clogged. When a clogged condition occurs, wate levels in the tank and bowl equalize and incoming water automatically shut off before overflowing.

A.I.A. NO. 29H





If you're a plumbing contractor... you will find the Silhouette is much easier to install. The No. 4100 weighs just 79 pounds, so you won't have any trouble handling it. Designed for a standard 12″ roughing.

Pressure is no problem either. The Silhouette operates on as little as 15 pounds or as much as 150 pounds or more!

Another time-saving feature of the Silhouette is the simplified anti-syphon ball cock with a minimum number of parts. It requires only one volume control adjustment to give proper operation for the pressure available.

POSITIVELY WILL NOT OVERFLOW!

***SPECIFY:** Water clos shall be Case #4100 elo gated or #4000 rou front non-overflow on piece with riser pi housed in dry chann separately from ta water. Ball cock shall Case #62 employing pump principle to aspira tank water and preve back-syphonage. Co plete with tailored hi impact polystyrene se*

Case distinctive one-piece water closets are available through leading plumbing wholesalers everywh

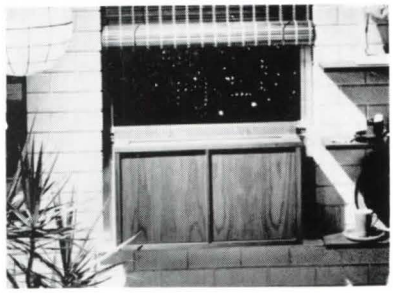
Case
SINCE 1853

CASE MANUFACTURING
Division of Ogden Corporation • Robinson, Illinois

New Products

continued from page 150

ABINETS FOR ROOM AIR CONDITIONERS



Vooden cabinets fit ver room air condi-oners to give fronts hat will blend with irniture. Cool air is irected into the room hrough louvers or anes in cabinet top. *Iajor Appliance Div., Vestinghouse Electric orp., Columbus, Ohio*

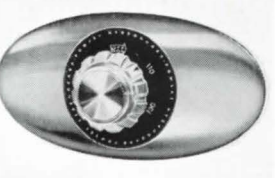
CIRCLE 333 ON INQUIRY CARD

URKISH BATH FOR HOME BATHROOM

home Turkish bath that can be installed in any tub or hower has an automatic electric steam generator that is laced in a nearby closet, ceiling or wall. Ten models are vailable to fit any enclosed area from 60 to 990 cu ft. *utomatic Steam Products Corp., 3 W. 61st St., New York 3, N.Y.*

CIRCLE 334 ON INQUIRY CARD

HOWER/BATH THERMOSTAT



Shower/bath thermostat maintains exact temperature selected. Safety features stop scalding water even if handle is turned to maximum "hot" position and prevent sudden bursts of hot or cold water. Jew styling combines an easy-to-handle transparent con-rol knob and contrasting dial face. *The Powers Regulator o., 3400 Oakton St., Skokie, Ill.*

CIRCLE 335 ON INQUIRY CARD

IASONRY SIMULATES BRICK

gun-applied masonry product called *Brickstone* is sculp-ired with special tools to give the appearance of real rick or stone. *Brickstone International, Inc., 4125 Rich-ond Ave., Houston 27, Tex.*

CIRCLE 336 ON INQUIRY CARD

ORTABLE DISHWASHER

obile Maid portable dishwashers have *Textolite* lami-ated plastic tops that double as serving tables in dining reas. *General Electric, Appliance Park, Louisville, Ky.*

CIRCLE 337 ON INQUIRY CARD

NTERLOCKING SIDING PANELS

ura-Lok interlocking siding pan-s are made of rigid polyvinyl loride in colors that run through e entire thickness of the mate-al, so that the panels never need inting. The material is fire-re-stant, "dent-proof" and unaf-cted by weather. The 12½-ft-ng panels can be handled by one an. *Dura-Lok Div., Acorn Chem-l Co., 8203 Franklin Blvd., eveland 2, Ohio*

CIRCLE 338 ON INQUIRY CARD

KEY: ① 8"x4"x6" BLOCK ② 8"x4"x8" BLOCK ③ 8"x4"x8" "U" LINTEL BLOCK

Watch for the Concrete Industries HORIZON HOMES program in your area.

For wonderful walls with a timeless flair

Architect: *Palmer & Krisel*

CREATE WITH BLOCK

Design dramatic walls of fashion with the versatility of concrete masonry. Countless shapes and sizes of block let you create rich wall expressions for new homes. And qualities abound: more beauty and space per dollar, complete fire-safety, unusually high sound absorption, self-insulation and little need for maintenance. See your local NCMA block producer.

NATIONAL CONCRETE MASONRY ASSOCIATION • 1015 WISCONSIN AVENUE, N.W. • WASHINGTON 7, D.C.

New Literature for Home-Planning

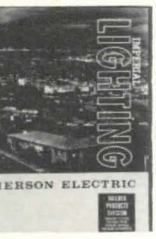
Free literature about products for the house made available from manufacturers through reader inquiry service

NTRAL AIR CONDITIONING

32-page handbook on central air ditioning discusses installation d operating costs and gives design ggestions. *E. I. Du Pont DeNeurs & Co., Wilmington 98, Del.*

CIRCLE 400 ON INQUIRY CARD

CORATIVE LIGHTING



(A.I.A. 31-F-2) Decorative lighting fixtures—including 84 new designs—are illustrated and described in 78-page catalog. *Emerson Electric Mfg. Co., 00 Florissant Ave., St. Louis 36,*

CIRCLE 401 ON INQUIRY CARD

AINLESS STEEL SINKS

o lines of stainless steel sinks (20 ge and 18 gage) are described in ht-page catalog. *Vance Industries, ., 7401 W. Wilson Ave., Chicago Ill.*

CIRCLE 402 ON INQUIRY CARD

HARDBOARD SIDING, PANELS

Two illustrated, 16-page booklets give information of Masonite hardboard sidings (A.I.A. 19-D-2) and hardboard panels for interiors, available in a variety of surface patterns. *Masonite Corp., 29 N. Wacker Dr., Chicago 6, Ill.*

CIRCLE 403 ON INQUIRY CARD

EPOXY-RESIN FLOORS

A fiber-glass-reinforced epoxy resin is used for resilient floors which simulate natural slate and brick floors. Data sheet gives details. *Chemtronics, Inc., 2040 S. Hamilton Rd., Columbus 27, Ohio*

CIRCLE 404 ON INQUIRY CARD

For more information . . . circle the key numbers of the literature you want (see number below each literature item) on the Inquiry Card, pages 155-156

WOODEN DOORS

(A.I.A. 19-E-1) All types of decorative wooden doors are illustrated in an eight-page booklet which gives data on sizes and thicknesses. *Simpson Timber Co., 2040 Washington Bldg., Seattle 1, Wash.*

CIRCLE 405 ON INQUIRY CARD

MEDICINE CABINETS

(A.I.A. 29-J) Medicine cabinets, lavatory mirrors and accessories are illustrated in 32-page catalog. *The F. H. Lawson Co., Cincinnati 4, Ohio*

CIRCLE 406 ON INQUIRY CARD

PINE WINDOWS

(A.I.A. 16-L) Pine panel windows with straight-line or bow shape are pictured in two folders. *Woodco Corp., North Bergen, N. J.*

CIRCLE 407 ON INQUIRY CARD

more literature on page 161

Would your client like living in a steel-framed house?

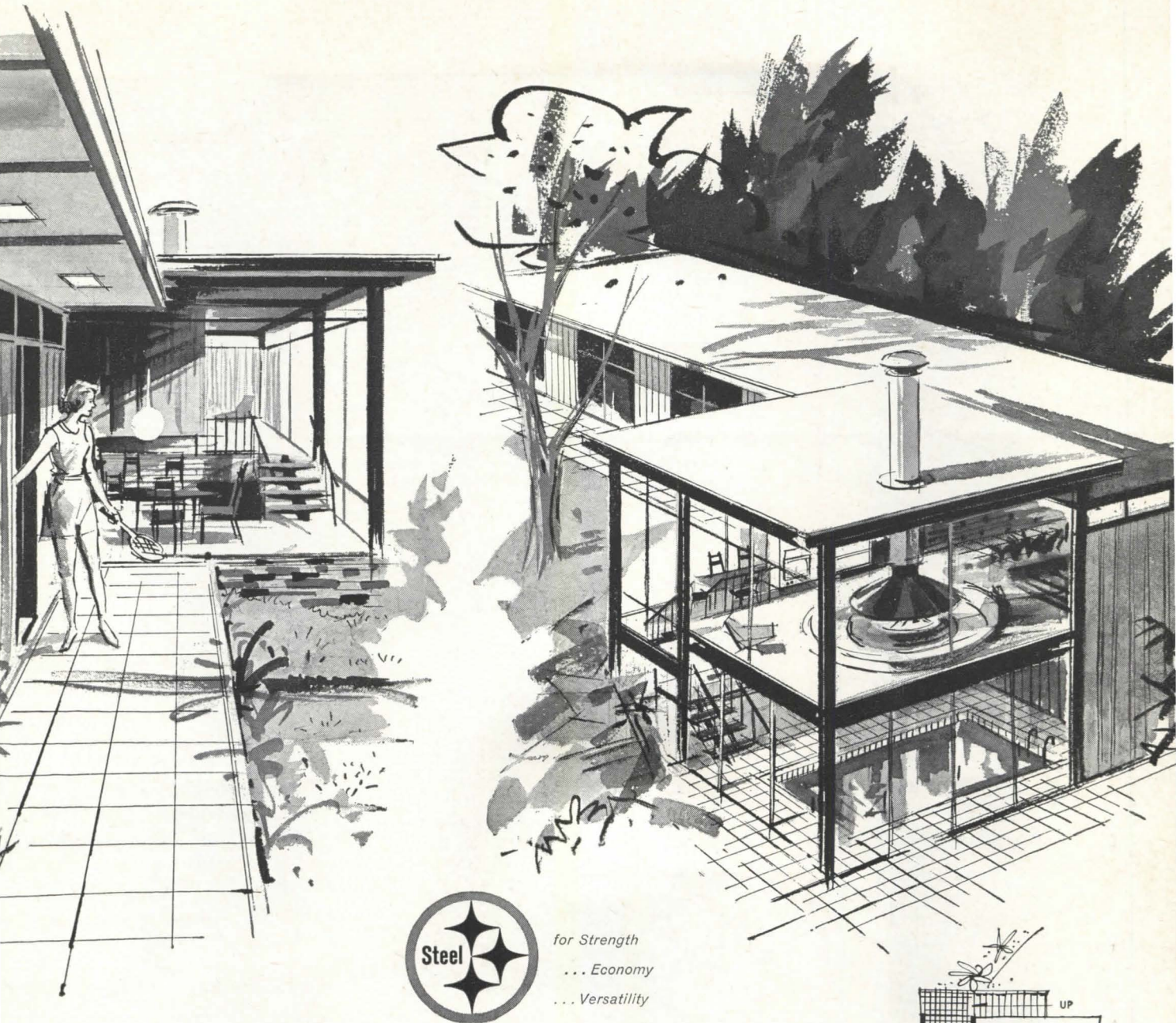
If your client likes crisp, contemporary design . . . if he likes outdoor-indoor living along with absolute privacy, a steel-framed house might be his cup of tea. Here's why.

STEEL PERMITS FREEDOM OF DESIGN. The lim tions of other materials disappear when you des with steel. It's just right for contemporary ar tecture. It allows big, open areas, 30, 40 or more wide without any interior supports whatsoever. S framing also permits flexible interiors, often movable partitions instead of fixed walls. S framed houses can easily be expanded to meet fu family needs, too. And you can design generous o hangs outside for sunshade effects, for patios covered walkways.

CURTAIN WALLS OFFER DRAMATIC POSSIBILIT When a house is framed with steel, the walls do carry weight. Exterior walls need be designed to provide insulation and security. Many type panel materials can be put in place for less than cost of conventional wall systems. For instance, h glass panels and sliding glass doors can be pl between the steel columns to bring the outdoors Where opaque wall materials are preferred, you use anything you like—porcelain-enameled s plastics, wood, brick, or stone.

PROBLEM SITES. With steel you can build on side of a steep hill, or on top of rock formati You can even build *over* the terrain—elevating house on steel stilts. This makes "impossible" usable. Such lots can often be bought at bar prices, and save on grading, too. And if the "p lem" site is rugged but attractive, its natural be needn't be bulldozed away. Save the trees, the sh the rocks.

HOW ABOUT THE COST? With "problem" steel commonly *saves* clients money. But even on lots a steel-framed house need not cost a penny than any other.

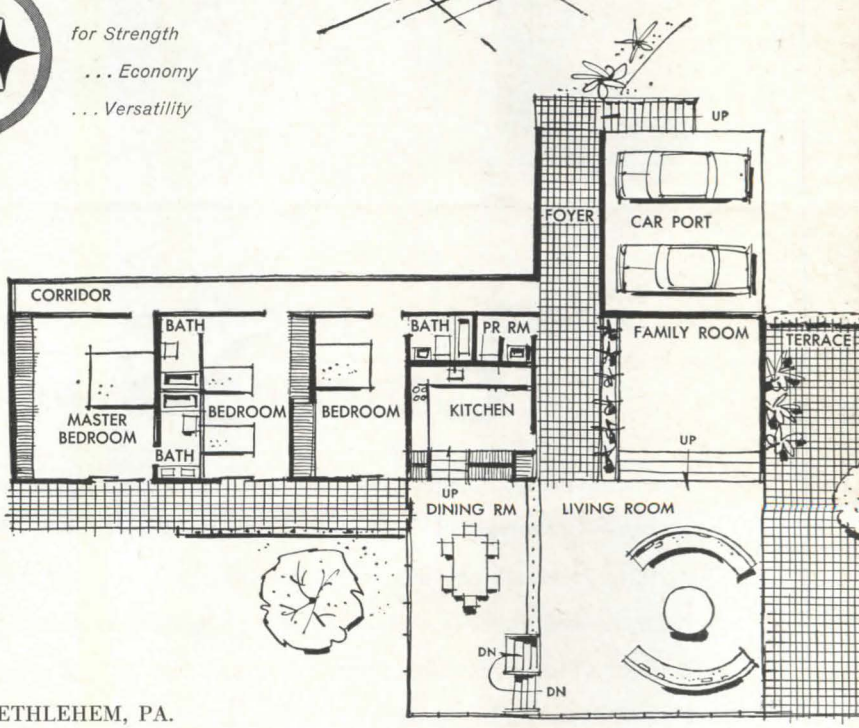


Steel

for Strength
. . . Economy
. . . Versatility

ɔW ABOUT TIME? Once you complete the design a steel-framed house, it can be ready for occuncy faster than any other type. A fabricating shop n prepare the steel in a few days; most likely the tire frame can be put up in a matter of hours—d quickly roofed over—compared with many days quired for a carpenter-built house.

ɛE LITERATURE AVAILABLE. We'd be happy to d you a new booklet showing what other skilled hitects and builders have done for clients just : your own. Write to Advertising Department, hlehem Steel Company, Bethlehem, Pa.

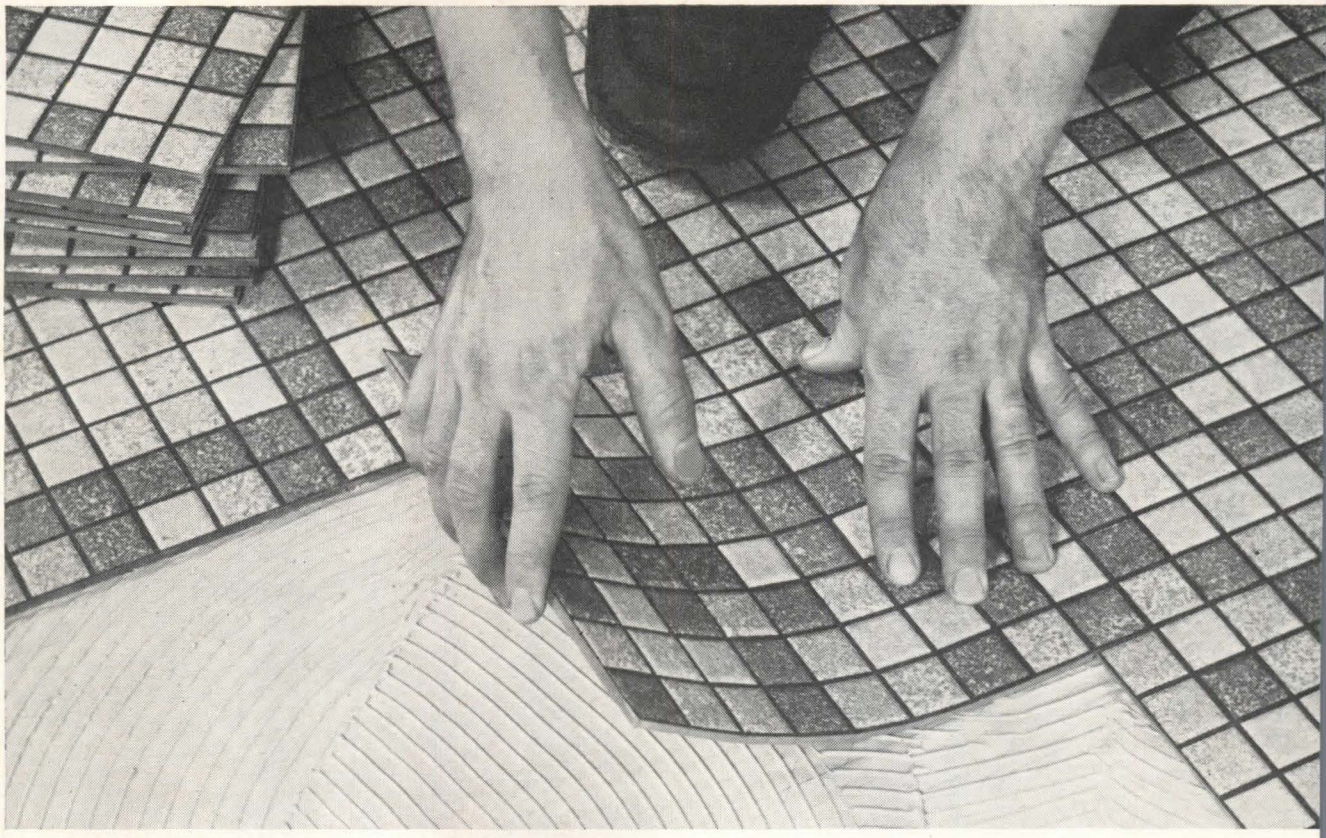


BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.
Export Sales: Bethlehem Steel Export Corporation

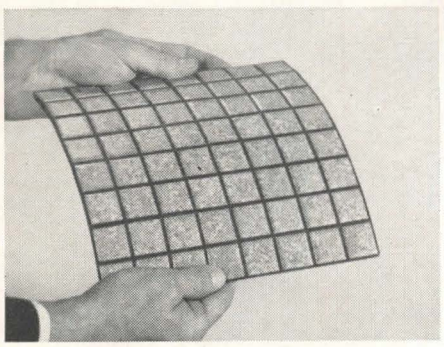
ETHLEHEM STEEL

BETHLEHEM STEEL

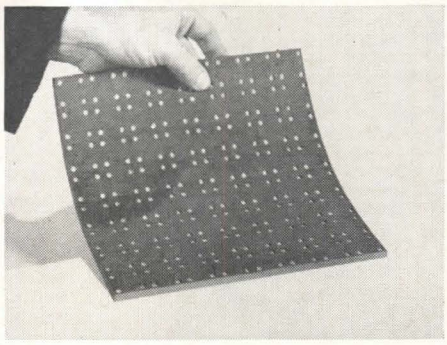
For more data, circle 55 on Inquiry Card



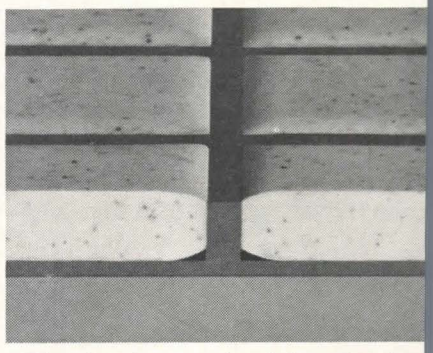
Each 9″ x 9″ x 9/32″ Ceramaflex tile is made up of 64 one-inch square ceramic tiles securely bonded in a pre-formed flexible rubber grid. It's quickly and inexpensively installed on, above or below grade. And it's ready for use the instant it's laid.



This is the "working" surface of Ceramaflex—genuine dent-proof ceramic tile in one-inch squares, joined by impervious rubber to eliminate grout failures.



Now let's look at the back. This cushion of live rubber remains permanently flexible—guarantees a lifetime of comfort and quiet underfoot.



This enlarged cross-section of Ceramaflex shows the relationship of the rubber grid to both back and sides of each individual tile. Notice how the joint surface is flush with the edge of the tile

There's only one resilient ceramic flooring...

CERAMAFLEX* by Romany•Spartan

Where resilience, permanence and minimum maintenance are required, there's only one answer—Ceramaflex. Choose from a handsome variety of plain colors and buckshot patterns to create any desired decorative effect. Use unglazed in areas where foot traffic is heavy and either glazed or unglazed where light service is anticipated. Your nearby Romany•Spartan distributor will provide samples and additional information. Or write United States Ceramic Tile Company, Department AR-19, Canton 2, Ohio.

ROMANY SPARTAN® CERAMIC TIL

Ceramaflex® is the exclusive product of United States Ceramic Tile Company

MEMBER

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For more data, circle 56 on Inquiry Card

New Literature

continued from page 157

BUTTON COMBINATION LOCK

sheet gives details on a locking system for t drawers and doors which consists of a col- f five buttons and a small knob. There are 1,800 le combinations. Changes can be made quickly ıt dismantling or using tools. *Simplex Lock 150 Broadway, New York 38, N.Y.*

CIRCLE 408 ON INQUIRY CARD

ER CABINET FOR BATHROOMS

(A.I.A. 23-I, 29-I) *Visionaire* corner cabinet for bathrooms has large capacity and adjustable shelves. When wall mirror is used, it fits behind mirror door frame giving the effect of a single mirror. The cabinet may be used on either right or left side. Folder gives details and suggested arrangements. *Triangle Products, 632 S. Indiana Ave., Chicago 16, Ill.*

CIRCLE 409 ON INQUIRY CARD

IINUM SPACE DIVIDERS

ıtive aluminum space dividers are strong and easily assembled to almost any size using square panels. Folder shows applications in s settings. *Meta-Mold Aluminum Co., Cedar- Wis.*

CIRCLE 410 ON INQUIRY CARD

ONIC-ELECTRIC BASEBOARD

gives details on *Sunnybase-Lectric* hydronic- baseboard heating system. Each baseboard contains its own heating element and therm- controls. *Crane Co., Johnstown, Pa.*

CIRCLE 411 ON INQUIRY CARD

SH FURNITURE

ıt catalog of furniture from Denmark import- Mills-Denmark shows the complete line includ- ore than 40 new items. *Mills-Denmark, Inc., 56th St., New York 22, N.Y.*

CIRCLE 412 ON INQUIRY CARD

VAY GLASS FOR FRONT DOOR

describes *Mirropane,* a one-way glass for doors. When outside of door is lighted and is dim, person inside can see out but those see only a mirror. *Libbey, Owens, Ford Glass 1 Madison Ave., Toledo 7, Ohio*

CIRCLE 413 ON INQUIRY CARD

REE WOODEN SHUTTERS

rs with frames of ponderosa pine have sliding panels made of birch plywood. Translucent ber liners and two filigree patterns provide a of designs. Folder shows applications as fur- fronts and as window shutters. *Artply Co., 07 Shepherd Ave., Brooklyn 8, N.Y.*

CIRCLE 414 ON INQUIRY CARD

more literature on page 164

For more data, circle 57 on Inquiry Card ➔

AINE COAST HOME POINTS "V" TO SEA •

nfortably...with PPG products

A MARK" was designed by Edwin A. Koch, AIA, for a client with a erse range of talents and interests. The structure's "V" shape evolved n the consideration that the house, instead of facing out to sea, be nted in both directions to views of the shore's surf-etched rocky files. The resulting plan meets this challenge through functional use xpansive glazed areas. Each major room opens to the view with fixed n or floor-to-ceiling Prrrco® sliding glass doors which, in season, open admit cooling breezes from the sea. All glazing is PPG Twindow® ulating Glass. For further information about these and other PPG ducts, write Pittsburgh Plate Glass Company, Room 3017, 632 Fort quesne Boulevard, Pittsburgh, Pennsylvania.

EDWIN A. KOCH, AIA, ARCHITECT
Residence for Miss Joan Baldwin
Cape Neddick, Maine
Archer Littlefield, Builder

For more data, circle 58 on Inquiry Card

New Literature

continued from page 161

KITCHEN HOODS

Eight models of kitchen hoods, including one with automatic control, are pictured in eight-page booklet. *Emerson Electric, 8100 Florissant Ave., St. Louis 36, Mo.*

CIRCLE 415 ON INQUIRY CARD

INTERCOM-RADIO

(A.I.A. 31-I-51) Built-in intercom-radio system uses transistors. Intercom is independent of the radio. Eight-page booklet shows models available. *NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio*

CIRCLE 416 ON INQUIRY CARD

VENTILATING EQUIPMENT

Ceiling and wall ventilators, range and oven hoods, exhaust fans, attic fans and radiant wall heaters are shown in 28-page catalog. *Fasco Industries, Inc., Rochester 2, N.Y.*

CIRCLE 417 ON INQUIRY CARD

PLASTIC-FINISHED PANELS

Eight-page catalog shows installations of *Marlite* wall and ceiling paneling, made of hardboard with a washable plastic laminate surface. *Marsh Wall Products, Inc., Dover, Ohio*

CIRCLE 418 ON INQUIRY CARD

CEDAR SIDING

(A.I.A. 19-D) Advantages of bevel siding made of western red cedar are listed in brochure. *Western Red Cedar Lumber Assoc., 4403 White-Henry-Stuart Bldg., Seattle 1, Wash.*

CIRCLE 419 ON INQUIRY CARD

ACRYLIC SKYLIGHTS

Skydome acrylic skylights are described in illustrated brochure. *American Cyanamid Co., 5 Bay State Rd., Cambridge 38, Mass.*

CIRCLE 420 ON INQUIRY CARD

COLOR FOR CONCRETE

(A.I.A. 3-M-1) Color chips are included in six-page folder on *Harcol Redi-Mixed*, a quartz aggregate that hardens and colors concrete surfaces. *Sonneborn Bldg. Products, Inc., 10 E. 40th St., New York 16, N.Y.*

CIRCLE 421 ON INQUIRY CARD

BUILDING PRODUCTS

(A.I.A. 27) Foldi doors, closet acc sories, door ha ware, ventilato range hoods, ba room accessories a canopies are some the household bui ing items illustrated in a 64-pa color-coded catalog. *Leigh Buildi Products, Coopersville, Mich.*

CIRCLE 422 ON INQUIRY C

LIGHTING HINTS

"Ways to Brighten Your Home w Light" gives details on cornices, lances, wall brackets, luminous c ing and wall panels, etc. *Inqu Bureau, General Electric Co., N Park, Cleveland 12, Ohio*

CIRCLE 423 ON INQUIRY C

REDWOOD SAUNA ROOM

Folder gives details on *Viking* sau bath, which is made of interlock solid redwood bricks 3½-in.-th that stack to make a sturdy ro An electric heater is used. *Vik Sauna Co. of New York, 330 E. 4 St., New York 17, N.Y.*

CIRCLE 424 ON INQUIRY C

;CTRICAL EQUIPMENT

tinghouse's complete line of ucts for residential building is n in 32-page catalog. *Westing-e Electric Corp., P. O. Box 2099, ;burgh 30, Pa.*

CIRCLE 425 ON INQUIRY CARD

CHEN VENTILATING

lines of kitchen ventilating s are described in data sheets. is ventless with charcoal filter. *le-Wind Div., Robbins & Myers, 7755 Paramount Pl., Pico Ri-, Calif.*

CIRCLE 426 ON INQUIRY CARD

OD FLOORS

.A. 19-E-9) Construction of l floors using *Versabord* under-ient is discussed in six-page er. *Weyerhaeuser Co., Tacoma 1, h.*

CIRCLE 427 ON INQUIRY CARD

NELS

tic-finished hardboard panels for or use and fiber-glass-reinforced lic panels for outdoor use are vn in six-page booklet. *Barclay . Co., Bronx 51, N.Y.*

CIRCLE 428 ON INQUIRY CARD

GAS LOG FIREPLACES

(A.I.A. 14-E-5) Folder shows four models of *Dyna-Flame* factory-built gas log fireplaces which give an effect similar to wood-burning fireplaces. They can be mounted on existing walls. *Dyna Mfg. Co., 4865 Exposition Blvd., Los Angeles 16, Calif.*

CIRCLE 429 ON INQUIRY CARD

FLOORS AND CEILINGS

(A.I.A. 23-G) Color pictures of linoleum and resilient floor tiles are shown in 24-page specification guide. Two other booklets give decorating ideas using Armstrong acoustical ceilings and *Excelon* vinyl-asbestos tile. *Armstrong Cork Co., Lancaster, Pa.*

CIRCLE 430 ON INQUIRY CARD

WATER-ELECTRIC BASEBOARD

(A.I.A. 30-C-44) Operation of an electro-hydronic baseboard heating system without plumbing is explained in folder. *International Electric Heating Div., 3800 Park Ave., St. Louis 10, Mo.*

CIRCLE 431 ON INQUIRY CARD

ALUMINUM WINDOWS

(A.I.A. 16-E) Complete line of aluminum windows is listed in 12-page catalog. *Fleet of America, 2015 Walden Ave., Buffalo 25, N.Y.*

CIRCLE 432 ON INQUIRY CARD

COOKING EQUIPMENT

Cooktops and exhaust hoods, built-in ovens and *Americana* ranges with window oven above and regular oven below surface units are detailed in separate folders. *General Electric, Appliance Park, Louisville 1, Ky.*

CIRCLE 433 ON INQUIRY CARD

BATHROOM CABINETS

Bathroom cabinets, accessories, mirrors and lighting fixtures—212 products in all—are described in 24-page catalog. *The Grote Mfg. Co., Madison, Ind.*

CIRCLE 434 ON INQUIRY CARD

HOME SODA FOUNTAINS

Three styles of mobile and stationary home soda fountains are described in folder and data sheet. *James J. Gavigan & Co., Inc., 388 Eleventh Ave., New York 1, N.Y.*

CIRCLE 435 ON INQUIRY CARD

more literature on page 166

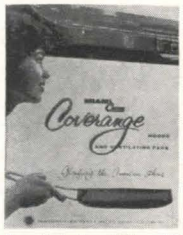
New Literature

continued from page 165

VINYL UPHOLSTERY
Samples of three kinds of vinyl u holstery fabric—*Naugahyde, Ro Naugahyde* and *Naugaweave*— a included in booklet. *United Sta Rubber, Mishawaka, Ind.*
CIRCLE 436 ON INQUIRY CA

BUILT-IN SCALE
Built-in bathroom scale with lock- place handle folds into wall. *Da Steel Products Co., 219 W. 7th Los Angeles 14, Calif.*
CIRCLE 437 ON INQUIRY CA

HOODS AND CABINETS



(A.I.A. 29-J, 30 1) Range hoods a ventilating fans illustrated in page booklet. Ba room cabinets, n rors and accesso are shown in 32-p booklet. *The Philip Carey Mfg. Middletown, Ohio*
CIRCLE 438 ON INQUIRY C

INSULATION
(A.I.A. 37-C) Design data and c considerations for residential ins tions are given in 20-page book *Owens-Corning Fiberglas Corp., ledo 1, Ohio*
CIRCLE 439 ON INQUIRY C

VINYL, RUBBER FLOORING
Color swatches of *Amtico's* vinyl rubber flooring are given in 16-p booklet. Fourteen installation tures are included. *Amtico, Tren 2, N. J.*
CIRCLE 440 ON INQUIRY C

TILTING WINDOWS
Twin Tilt hardware that conv double-hung windows into tilt windows is detailed in brochure. *tional Twin Tilt Window Corp., Steuben St., Pittsburgh 20, Pa.*
CIRCLE 441 ON INQUIRY C

PLANNING PATIOS
An idea booklet on patios has sugg tions on how to plan and light pa and gardens. Included is informa about using *Waterlox* protec coatings for wood, concrete, st masonry and metal surfaces. *Empire Varnish Co., 2636 E. St., Cleveland 4, Ohio*
CIRCLE 442 ON INQUIRY C

Just add Flintkote

and you've got it made.

Make sure your houses are solid Flintkote and you're sure to make a *solid* hit with your clients. Quality is built into every Flintkote product. Client appeal is built in, too. One example: fabulous Designer's Solids—the most advanced color concept in floor tile. Another: brilliant new ceiling tile designs selected by a panel of women! It's the same story all down the line. And nobody makes a more complete, thoroughly advanced line of building products. But nobody! For roofing, siding, walls, floors, ceilings, chimneys—virtually everything but the front door — depend on Flintkote, America's broadest line of building products.

THE FLINTKOTE COMPANY, 30 ROCKEFELLER PLAZA, NEW YORK 20, NEW YORK

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Photographs of the houses by the following photographers appear on pages noted

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Berkeley 8, California

EDWARD A. BOURDON 62
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Houston, 23 Texas

ALEXANDRE GEORGES 86, 94
94 South Mountain Road
New City, New York

HEDRICH-BLESSING 98
450 East Ohio Street
Chicago 11, Illinois

ANTHONY LINCK 126
1450 Palisades Avenue
Fortlee, New Jersey

JOSEPH W. MOLITOR 70, 114
Post Office Box 549
112 Pine Street
Ossinging, New York

MARC NEUHOF 50, 78
207 East 43rd Street
New York 17, New York

JOE PAUL 82
660 N. Heliotrope Drive
Los Angeles 4, California

CHAS. R. PEARSON 74
18710 88th West
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WARREN REYNOLDS 118
Infinity Inc.
614 East Grant Street
Minneapolis 3, Minnesota

BEN SCHNALL 102
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JULIUS SHULMAN 122
Post Office Box 46206
Los Angeles 46, California

DOUGLAS SIMMONDS 110
11339 Waterford Street
Brentwood
Los Angeles 59, California

EZRA STOLLER 66, 90
Kirby Lane North
Rye, New York

GEORGE R. SZANIK 82
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ROBERT N. WARD 106
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The unique beauty of Ludowici special shapes shale flooring tile is now practical for your most budget minded client. Because of greatly increased demand, price reductions have been made on all special shape styles. No difference in quality or texture.

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Provence, Valencia and Renaissance patterns available in brushed or smooth, in red or fire flashed colors.

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HAWAII REPRESENTATIVES: Lewers & Cooke, Ltd., Honolulu

VALENCIA **PROVENCE** **RENAISSANCE**

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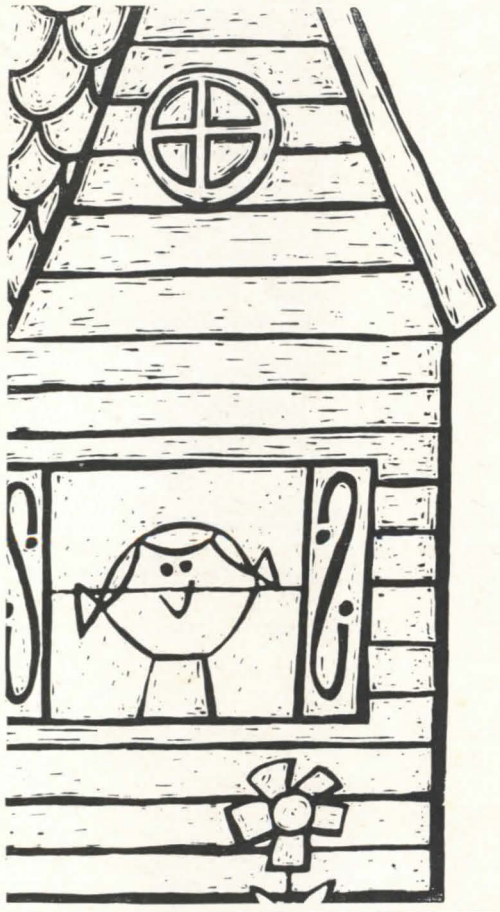

THE HOUSE THAT JACK BUILT . . .

. . . was completed ahead of schedule. One reason was Jack's use of the manufacturers' catalogs in Sweet's Light Construction Catalog File. In the building industry, there are three Sweet's Files—Architectural, Light Construction and Industrial Construction. Whenever you or your client has a building product need, reach for Sweet's, where a wide selection of manufacturers' catalogs is ready to speed and simplify your product selection and specification tasks.

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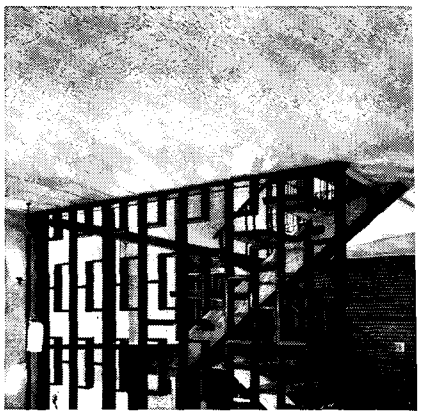

'OR SIGNIFICANT NEW HOMES (Like this house in Hartsdale, N. Y. Architect: Harry Wenning. Builder: Meadowbrook Development, Inc.)

. SIGNIFICANT NEW CEILING: ARMSTRONG FASHIONTONE®

looks monolithic, has deep fissures, and absorbs sound. Today's elegant homes deserve ew luxury ceilings. Deeply fissured Fashiontone tiles have edges that fit together so snugly ou scarcely see a seam. The ceiling is all one handsome uninterrupted design. Because ashiontone is made of mineral fiber, it's incombustible. And it's ideal for high humidity areas.

RITE FOR FREE SAMPLE: Write direct to Armstrong on your letterhead for a sample tile id data. Address your request to Armstrong, 05 Tenth Avenue, Lancaster, Pennsylvania.

Armstrong CEILINGS

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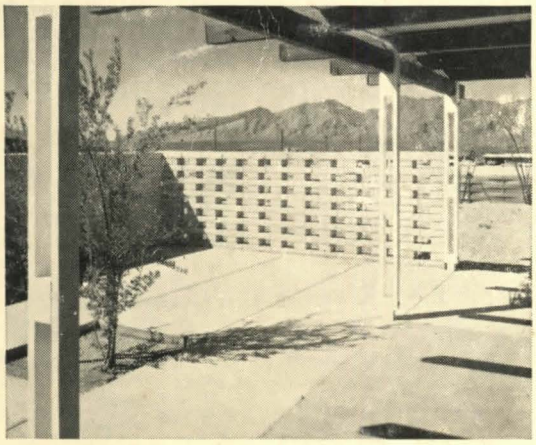
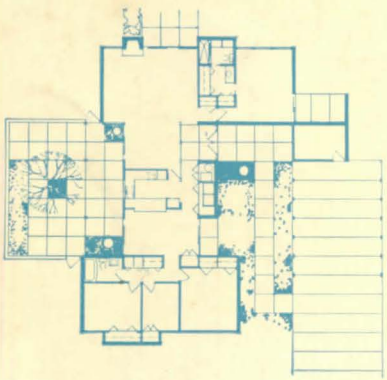
National award-winning home gives new spirit to desert living with modern concrete

Horizon Home, Tucson, Arizona, winner of 1962 National Design Award. Architect: Cook & Swaim, A.I.A., Tucson.



Slump block in full and half units provides an attractive wall for this patio. Floor plan below shows effective use of zone planning.



A dramatic blending of indoors and outdoors provides stimulating livability in this outstanding design from the Horizon Homes Program, sponsored by the nation's concrete industries.

From the many new and exciting forms of concrete masonry now available, the architect chose slump block. Its natural look and bold dimensions well suit the low, simple lines of the house. To extend the color and texture of the desert floor, wall areas below the windows are finished with stucco in earthy tones. In the courtyard and gardens concrete creates added textural interest—from abstract sculpture to the patio floors, terraces and gardens.

For distinctive home design in every locale, more and more architects are turning to modern concrete.

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of portland cement and concrete

For more data, circle 71 on Inquiry Card