

# HOUSE IN PIEDMONT, CALIF.

An unusual relationship of owner, architect and designer creates a home of outstanding beauty and usefulness, carefully fitted to a steeply sloping site.

"I reasoned that two good heads would do a better job in designing a house for my wife than just one. I tried the idea out on several of my architect friends, all of whom thought I was crazy. Their reaction convinced me that the idea was sound." So saying, famed California architect Clarence Mayhew asked equally famed British architect Serge Chermayeff to collaborate in the design of a home for Mrs. Mayhew. The idea did not seem crazy to Chermayeff who from his own experience had found that "if an architect designs his own house it becomes a laboratory experiment, whereas, if another architect does it, it is a solution." Mrs. Mayhew, accustomed to the ways of architects, was not dazzled by this array of talent, knew what she wanted and stuck to it. Thus, in 1941, began a unique association that produced the distinguished residence shown on these pages.

The Mayhews had purchased a lot 90 by 225 ft. in a well-to-do suburb of Oakland. The site, formerly part of the garden of a large estate, was in fact a grove of unusually handsome live oak trees on land sloping steeply to the south-east, with a pleasant view to distant hills. Ground-ivy covered the land beneath the trees. The first duty of the designer, then, was to disturb as little of the natural beauty of the site as possible, which meant placing a house of considerable size on a steep slope with a minimum of grading and tree removal, while at the same time meeting all other requirements.

The program established by the collaborators was that the house be separately zoned for the activities of adults and children, so that each could function independently. Also, it was desired that all living and sleeping rooms face south, with large glazed walls to admit view and sunshine. As much private garden space as possible was requested for the pleasure of indoor-outdoor living. Construction was to be in the manner typical of California, and costs were to be held to a minimum consistent with good design, materials and workmanship.

With the requirements of site and owner well in mind, the designer set to work, producing thirteen or fourteen different schemes, in all cases illustrated by three-dimensional sketches and small scale models. Eventually, architects and client came to unanimous agreement on a scheme which "answered 90 per cent of the problems."

After the basic scheme had been completed, Mayhew's office staff took over preparation of working drawings and specifications. Meanwhile Chermayeff went on to establish typical details and elevations, making perspective sketches in colored crayon and pencil, some of which are shown on the following pages. "The reason for making sketches," says Chermayeff, "is that in dealing with a three-dimensional problem—which architecture is—you have to think three-dimensionally on paper to test the idea in your head. You cannot possibly do that by limiting yourself to plans, sections and elevations; you have to go to a basis of what the eye really sees."

CLARENCE MAYHEW and SERGE CHERMAYEFF, Associate Architects; SERGE CHERMAYEFF, Designer



OWNER



ARCHITECT



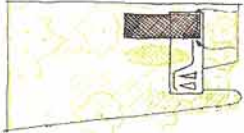
ARCHITECT-DESIGNER

TERRACE FACADE HAS CRISP ELEGANCE TYPICAL OF WHOLE HOUSE

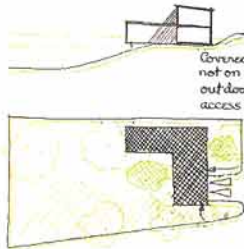




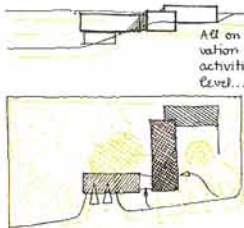
Little adaptation to slope... lack of intimacy between house and garden... outdoor living shadowed in afternoon... some good trees lost.



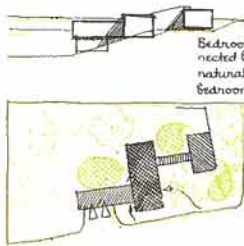
Covered porch lost... upper bedrooms not on garden level... shadow on outdoor living reduced... difficult access to garage... some trees lost.



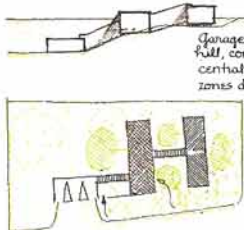
All on one level... considerable excavation and fill... adult and child activities zoned... bedrooms on garden level... a few trees cut.



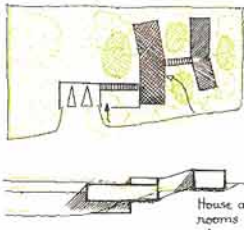
Bedroom block placed up hill, connected by stair passage following natural slope... private gardens for bedrooms... easier access to garage.



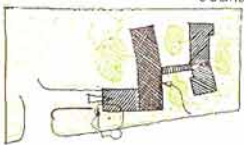
Garage and service yard placed down hill, connected by stair passage to central block... four distinct garden zones developed... enhance outward.



Garden courts opened by playing out plan blocks... all good trees retained... entrance moved to center of main plan block... level terrace outside living room.



House as finally built... additional rooms requested by owner placed above garage. Garage entrance re-oriented... all good trees retained.



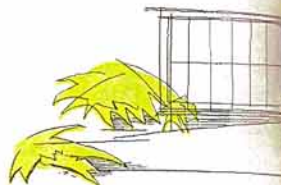
As the series of site plan studies on this page plainly shows, the final solution of the problem of placing a house on the site was achieved by separating sleeping, living, and car storage into three separate units, locating these units in a descending order on the natural slope, and then connecting them by two stair-passages. Such a solution overcomes the fault so often seen in hill-side houses: plenty of view but isolation from the actual ground. Here, however, all important rooms have a view and open directly on a garden area. Privacy from the street to the east is provided by the service wing for the adult living terrace, and by the upper stair-passage for the children's play terrace. Service and auto entrances are out of the way on the lowest level, allowing the main entrance to take full advantage of the romantic approach.

The plan of the central block is zoned for adult and child activities, with the kitchen and pantry as the intermediate link. Especially convenient is the large children's playroom adjoining both the pantry and maid's room for ease of supervision. After the children have retired, the playroom can serve as a living space for the maid. A stair leads down beside the pantry to the garage, laundry and storage space below.

The upper bedroom block also thoughtfully separates adults from children, each group being

given proper individual facilities. Especially noteworthy are the well-conceived drawer and hanging units, as well as the fine baths. Partitions in the children's area are removable to accommodate the inevitable spatial adjustments of a family with children.

Circulation within this dispersed plan is one of its most interesting features. To admit view and sunshine to each room on the south, it was necessary to place all circulation along the north side. On the living level, the main entrance occurs at the north, with the visitor passing a long screen to enter the living room itself. Similarly the connecting passage for the children's rooms on the sleeping level is at the north. Lower and upper stair-passage, rising along the natural slope of the site, with the charm of growing plants on one side and of a garden court view on the other.



EAST FACADE INDICATES FRANK ADAPTATION OF HOUSE TO SITE. BEDROOM WING IS AT RIGHT



into sections for conflicting activities.



Masterly wooden construction, eliminating all superfluous members, produces wide windows and spacious interiors.

Economy and appropriateness demanded that the Mayhew house be built in the wooden tradition prevalent in the region. But the same careful study that went into the plan was also given to the construction. Multiple elements, especially at the windows, were eliminated if they were not actually needed for structural reasons. Such elimination increased the openness and lightness of the house. It also required a finer craftsmanship, for framing usually overlaid by mill-made parts was now exposed.

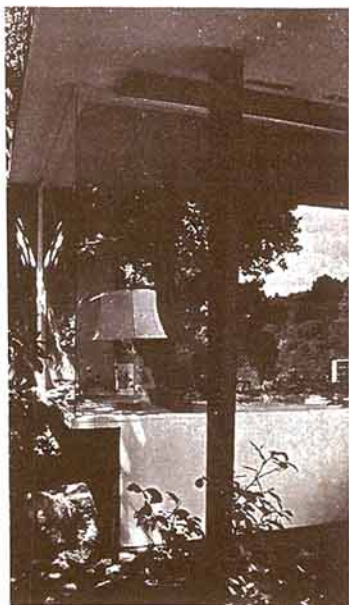
Fortunately, Mayhew's father is a retired contractor, and much of the precise beauty of construction is due to his care. Practically no sub-contracts were let, the work being done by directly hired labor with directly purchased materials. Supervision was constant and sincere. "It was a personal kind of act—not a case where you have never seen the contractor before and will never see him again," Chermayeff remembers with pleasure.

Foundations are of cast concrete, designed in many places to allow the house proper to overhang on all sides—a great aid in providing the ant traps universally required in California. Floors are composed of three-quarter inch sub flooring, covered by quarter inch plywood, and surfaced with asphalt tile. Walls are of two by fours, faced on the outside by 1 in. unpainted

redwood planking over 30 lbs. felt, and on the inside with quarter inch plywood or plaster board. Plaster is used in the baths only. Ceilings are of fiber board, and no other insulation is provided in roofs and walls. Heating is by forced hot air from two separate units located on the sleeping and living levels.

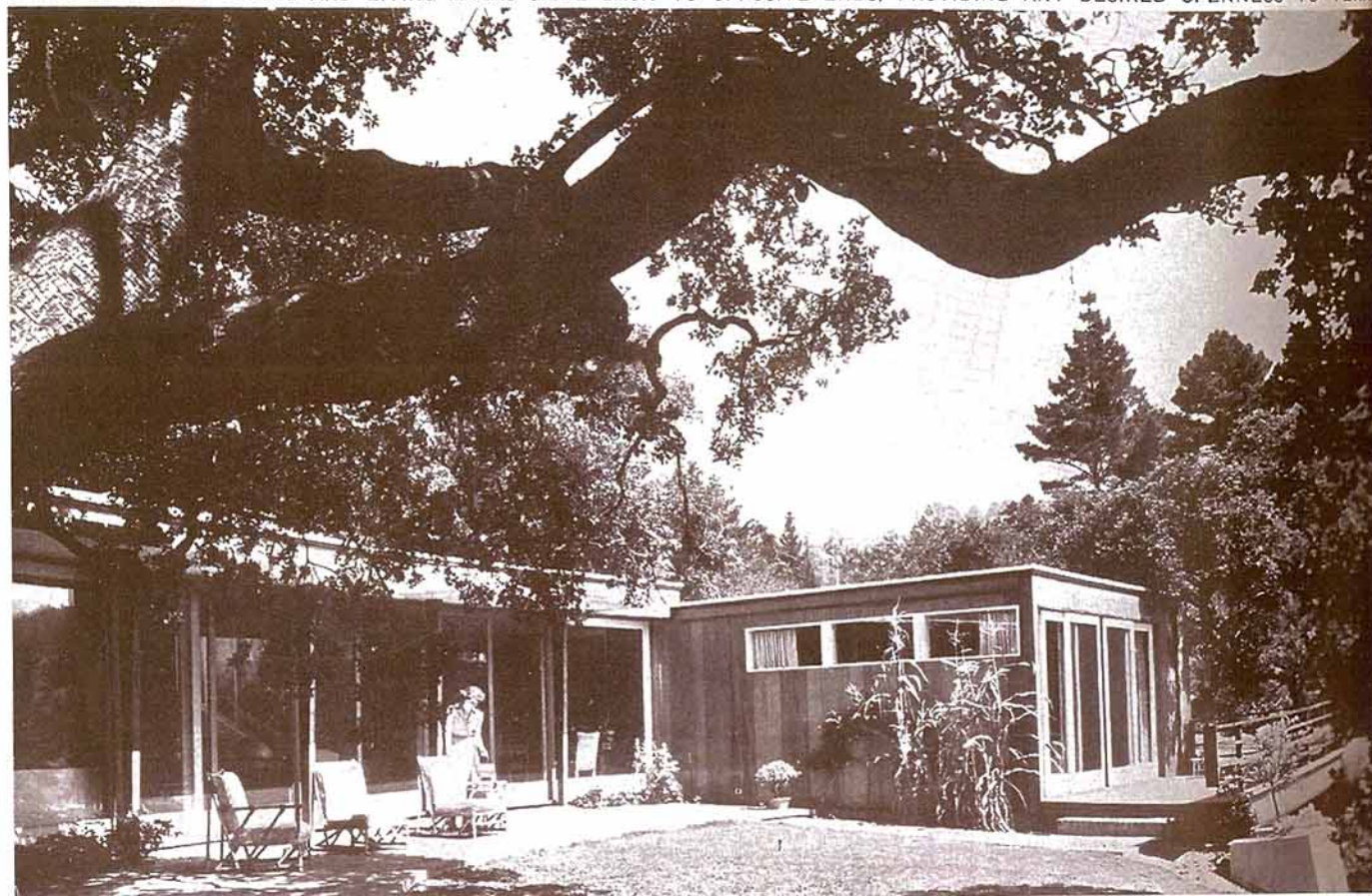
An interesting construction detail is that of the living-dining area ceiling. This inside space is spanned by joists 22 ft. in length. On the window side the joists are supported on a heavy longitudinal beam resting on free standing posts. Beyond the post line, a sun shade projects four feet. This projection is obtained, not by extending the roof joists, but by thinner members spiked to the sides of the main joists. Such a system gives lightness to the profile of the sun shade, and produces an elevation expressive of the true nature of the structural loads involved.

Interiors have been designed in an effort to reinforce the relation of inside and outside space provided by the plan. Ceilings are continuous from interior to exterior, windows are treated as an almost incidental interruption. Exterior materials are continued into the interior, as, for example, where redwood planking on the side of the children's playroom carries through to form one wall of the dining area. Sketch, below right, shows combination living-dining room.



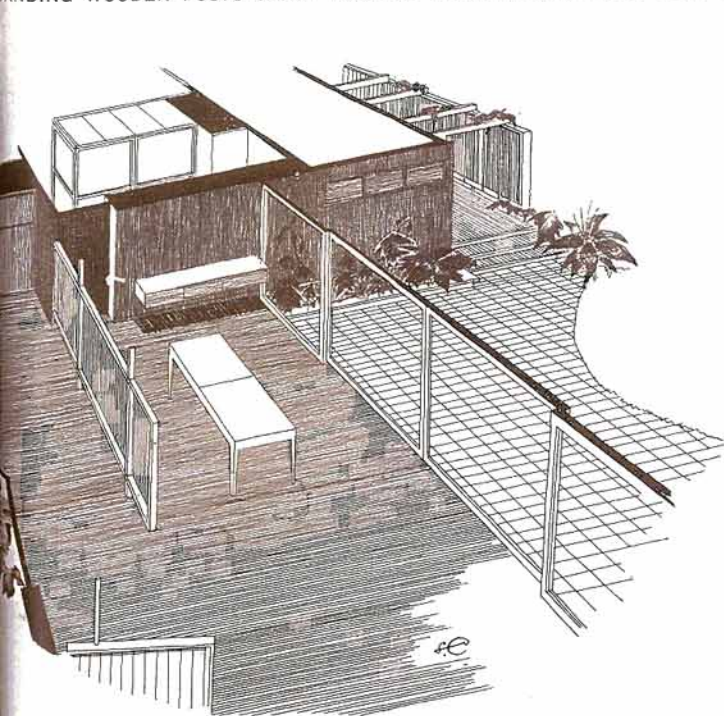
OM WINDOW HAS GLAZED CORNER

S AND SCREENS IN DINING AND LIVING AREAS SLIDE BACK TO OPPOSITE ENDS, PROVIDING ANY DESIRED OPENNESS TO TERR

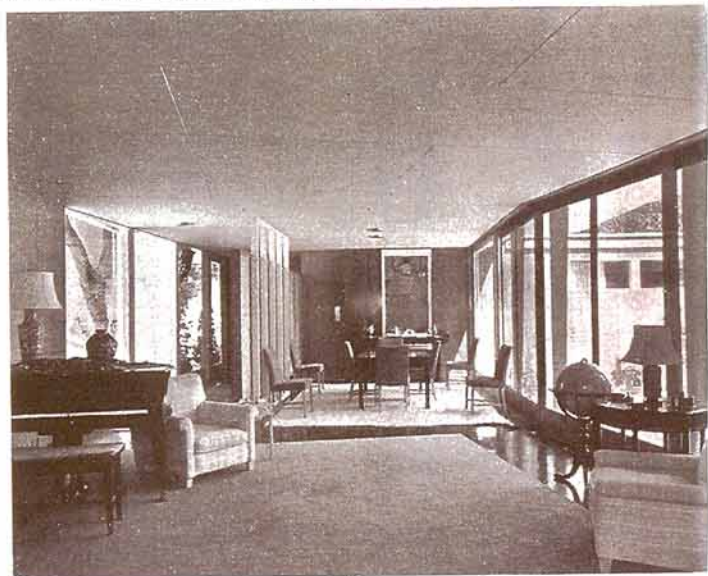




STANDING WOODEN POSTS CARRY LOAD OF LIVING-DINING ROOM ROOF INDEPENDENTLY OF SOUTH WALLS, COMPOSED ENTIRELY OF GLASS



SLATTED WOOD SCREEN SEPARATES HALL FROM DINING AREA



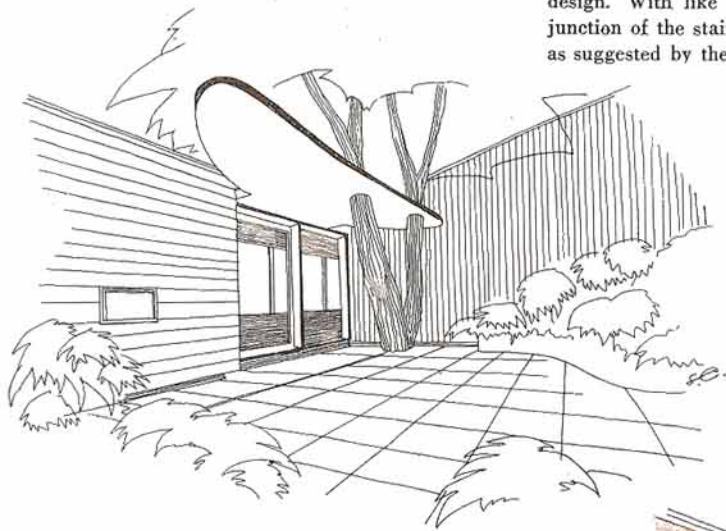
One of the interesting features of the house is its successful integration of European and American trends in modern architecture. Mayhew began his architectural practice in California in 1932, and is steeped in the American tradition of wood construction as modified and enlivened during the past decade in California. Chermayeff came to America in 1940 from England where he was one of the leaders in the English school practicing in the crisp, so-called International Style. It is rare for two designers of such different schooling to work together—much less, to produce a house which is a subtle blending of their points of view.

The resulting house is un-Californian in many details, but especially in not having a low-sloping roof with overhanging eaves and exposed rafters. Its neat white lines tie in the redwood surfaces at the top and bottom—"a true rectangular plan floating in space" on its undercut foundations. But it is endowed with a human quality typical of California's best work and rare in the International Style, and it is built of materials and in a manner traditional in America.

Architects will respect the care with which Chermayeff approached each detail of the design. For the important entrance to the house he made at least a dozen quick perspectives, two of which are shown below. Each had something to contribute to the proper visualization of the final design. With like zeal he studied the difficult junction of the stair-passage with the lower hall, as suggested by the sketch on opposite page.

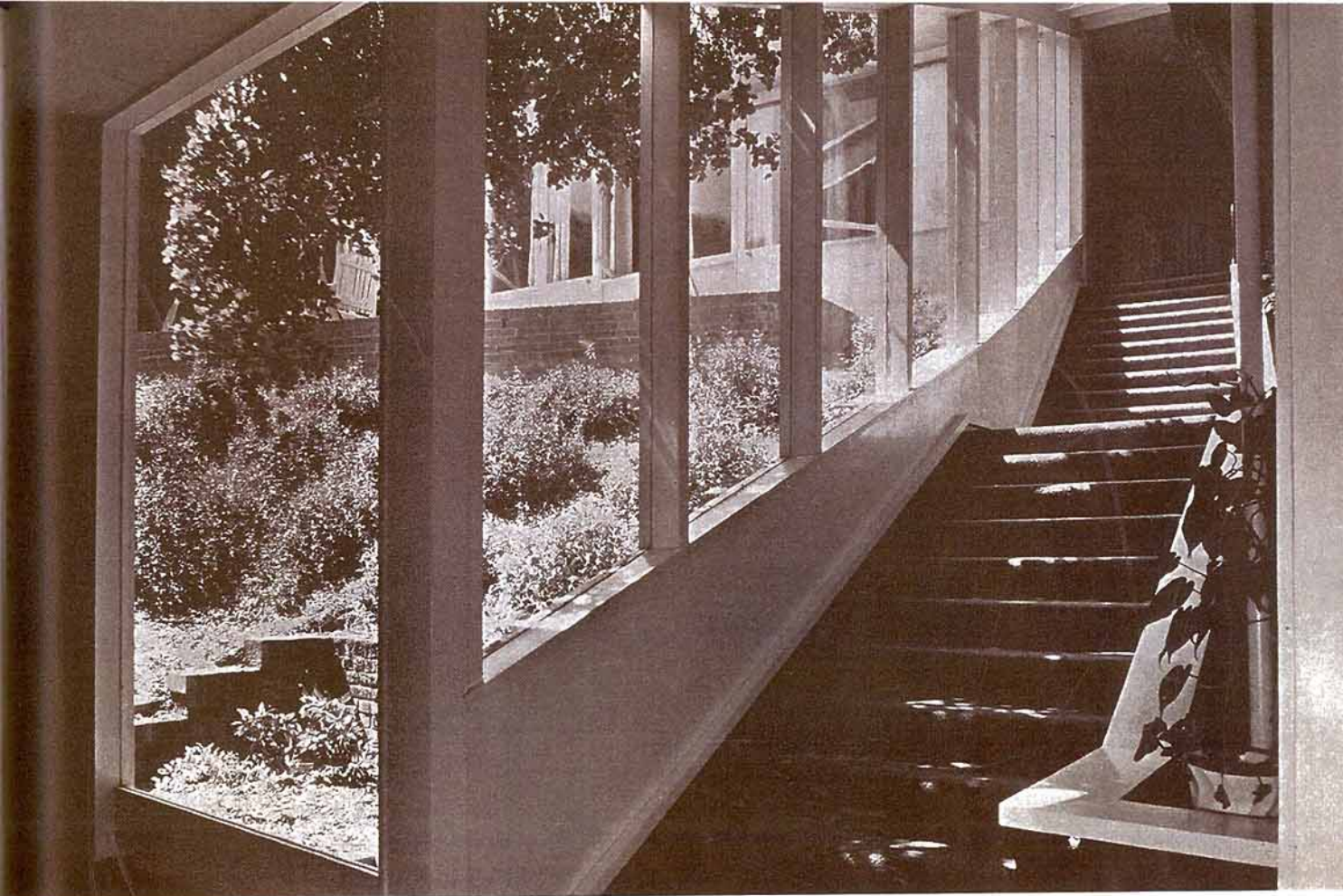
#### CONSTRUCTION OUTLINE

FOUNDATION—reinforced concrete. Waterproofing—cold emulsion. STRUCTURE: Exterior walls—vertical grain redwood, 30 lb. felt, studs; inside—wood veneer and plaster board. FLOORS—plywood and asphalt tile. ROOFS—5-ply tar and gravel. INSULATION: Roof and sound insulation—Insulite board, The Insulite Co. FIREPLACE: Dampers—Miller Co. SHEET METAL WORK—galvanized iron. WINDOWS: Sash—wood, Glass—plate. FLOOR COVERINGS: Main rooms—asphalt tile; Johns-Manville. Kitchen and bathrooms—linoleum; Armstrong Cork Co. WALL COVERINGS: Main rooms—veneer, U. S. Plywood Corp. Halls, Kitchen and bathroom—Sheetrock, U. S. Gypsum Co. PAINTS—W. P. Fuller and Pratt & Lambert, Inc. HARDWARE—Schlage Lock Co. ELECTRICAL INSTALLATION: Wiring system—knob and tube; Switches—General Electric Co. KITCHEN EQUIPMENT: Range, refrigerator and dishwasher—General Electric Co. Fan—West Wind Corp. LAUNDRY EQUIPMENT: Washing machine—Bendix Home Appliances, Inc. BATHROOM EQUIPMENT—Crane Co. PLUMBING: Soil pipes—cast iron; Water pipes—copper, Muller Brass Co. HEATING: Warm air system, Water heater—Crane Co.



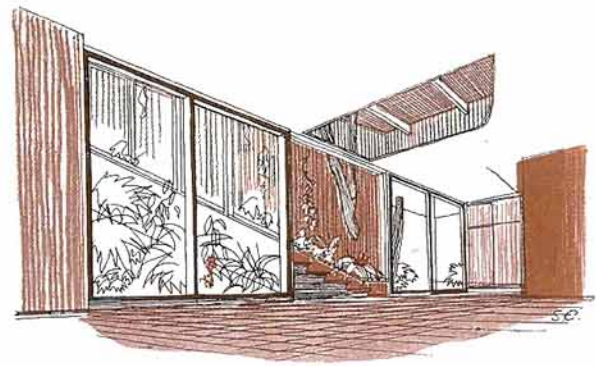
Canopy form "too free" and competitive with freedom of natural tree shapes. The rectangular plane, less dramatic, still pulls the trees by entrance into composition.





STAIR-PASSAGE LEADING FROM LIVING TO SLEEPING LEVELS MAKES A BEAUTIFUL FEATURE OUT OF A BORING NECESSITY

ENTRANCE IS LOCATED NEAR CENTER OF HOUSE AT LOWER END OF STAIR-PASSAGE



The stair is virtually a covered garden path between the two blocks. Both stair and hall are part of outdoors, curtained off by glass.