case study house #17

BY CRAIG ELLWOOD

MACKINTOSH & MACKINTOSH, CONSULTING ENGINEERS
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FURNISHINGS BY FRANK BROS.

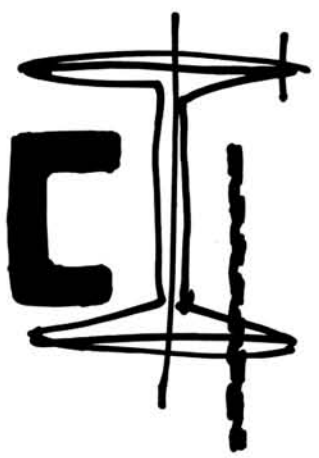
JASON HAILEY, PHOTOGRAPHY

A large part of this issue has been devoted to our Case Study House No. 17 because, among other things, we feel that it is a good house and a handsome object, and we are particularly pleased with the superb detailing and the imaginative use of materials. Because of its size and a number of local construction difficulties, we were rather long in bringing it off; but, having done so, we think that the experience has been rewarding not only to ourselves and those who participated but also to those who had the pleasure of seeing it on exhibition.

It has been our contention throughout the Case Study House program that these commissions, in the hands of first-rate architects and designers, have resulted in a provocative body of work of considerable value that has been suggestible not only to the profession but to a wide segment of the informed public.

We like to think that these houses, over the years, have been responsible for some remarkably lucid thinking in terms of domestic architecture. While it is true that not all have been every man's dream cottage, they have, nevertheless, had a demonstrably wide influence in the sound use of new materials and in re-use of the old, and have attempted, with considerable success, to suggest contemporary living patterns.

At least, we know that we have done everything within the limits of the facilities available to us to make this true, and it is our intention to continue in the conviction that we might make further valid contributions to the contemporary scene.—**Editor.**



THE HOUSE: The site is an irregular shaped acre, approximately 200′ x 230′. The terrain is level, except for a low rolling hill that begins to rise within 30′ of the rear of the property line. The area is in a verdant wooded valley, close to all the amenities of the city of Beverly Hills, but far enough removed to be considered suburban in its environment.

The house is planned for a family of four children, and plan organization and room sizes were governed by a specific program set forth by the client. There are separate bedrooms for the children, two boys and two girls, all under eight years of age. These rooms are minimum in size, with one bath serving each pair of rooms. The baths have Crane tub-shower units and dual lavatories set in Micarta-faced cabinets. Panaview aluminum-framed sliding glass walls open the children's bedrooms to a garden court walled with Davidson hollow clay block and Luxlite translucent glass framed with 2½″

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square steel tubing. There are 21 Panaview aluminum-framed sliding glass door units. These units were selected for their ease of detail and installation, their ease and quietness of operation, their complete weathersealing and anti-rattling qualities. For controlled ventilation, each bedroom also has a floor-to-ceiling Louvre-Leader glass jalousie unit.

The children's beds are framed with 2½" steel channel, and are cantilevered from the wall. Mattresses are 4½" core stock foam rubber on plywood slabs. Each bedroom has two beds. Bookcases cantilever from the walls opposite the beds, and the east wall of each bedroom is finished with bulletin board cork.

The master bedroom wing includes study, sleeping, dressing and bathing areas. The bath-dressing area separates study and sleeping areas, and is split into five compartments which may be used simultaneously since each is separate from the others. The dressing compartment has twin Micarta-faced lavatory units and a 34-foot wardrobe cabinet which extends the full length of the north wall of the master bedroom wing. All wardrobe doors in the house are walnut-veneered Novoply panels by U. S. Plywood Corporation. Locksets are Kwikset. The radiant-heated terrazzo tub and shower compartments open to a private court. Sliding glass walls open the study to a private court; the sleeping area to the pool terrace.

The hall leading from the bedroom wing to the living area also opens to the pool terrace and is lined with 32 feet of storage cabinets. In compliance with the client's program, the living room is purposely undersized on the theory that social entertaining will be limited to small groups where it will be desired to establish intimacy and warmth. The fireplace wall is clay block, the chimney is black sheet steel and steel bar andirons are cantilevered from the masonry. This wall extends through the glass to the terrace to provide a background for special planting.

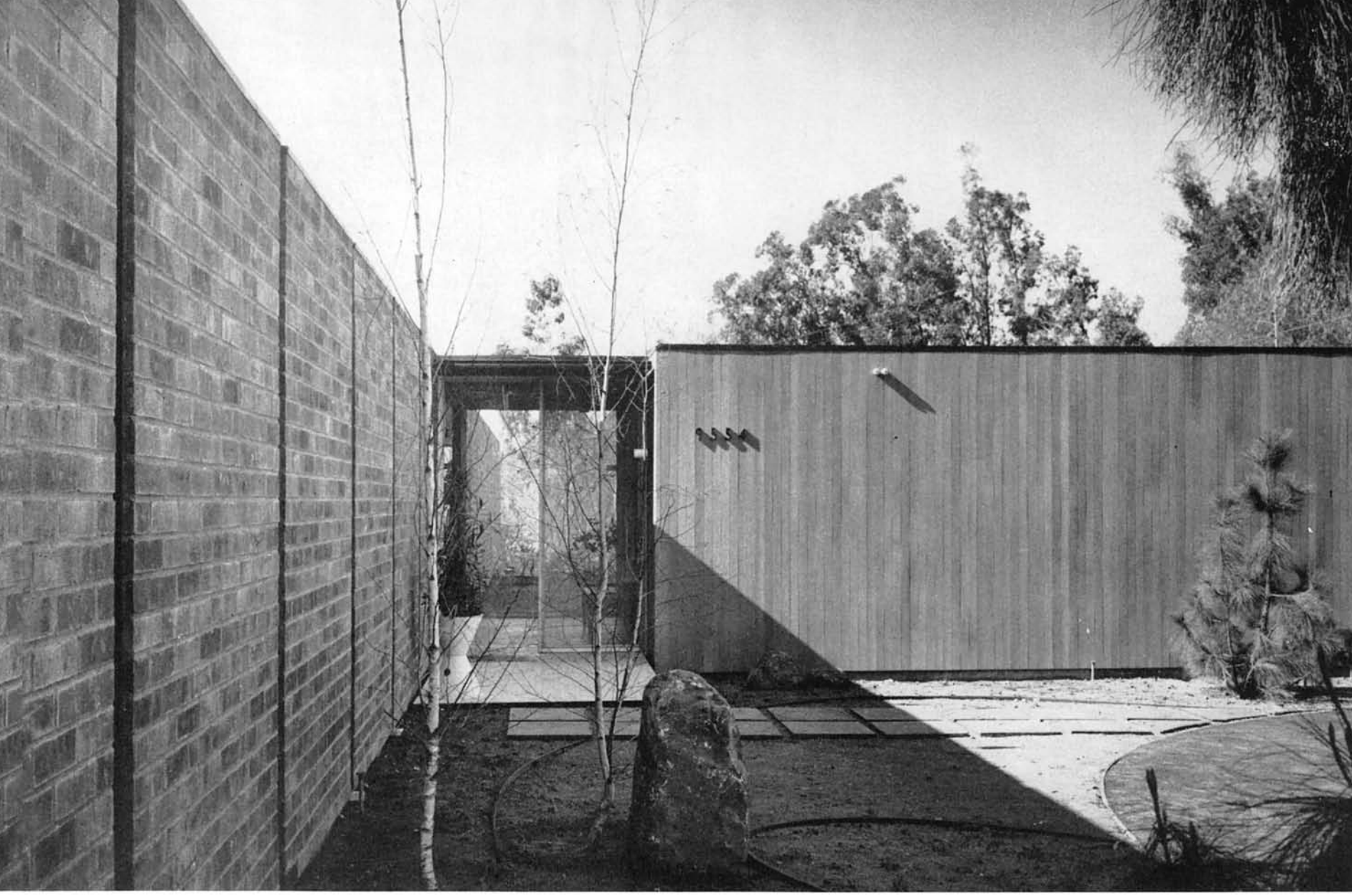
Throughout the house there has been consideration for a collection of contemporary paintings, a number of which hang in the entry abstractly grouped together to form a composition of design and color. This room thus serves a double function as central entry and as a small gallery. Paintings are spotlighted with a ceiling installation of Pry-lites equipped with a custom-made light shield. These fixtures are used throughout the house to light paintings. All recessed ceiling fixtures are also Pry-lites. Wall bracket fixtures are Lightolier's Lytecasters, and the dining room and kitchen hanging fixtures are Gruen Lighting Company Danish imports. Exterior flood lighting units are Stonco and exterior entry lighting units are Prescolite fixtures.

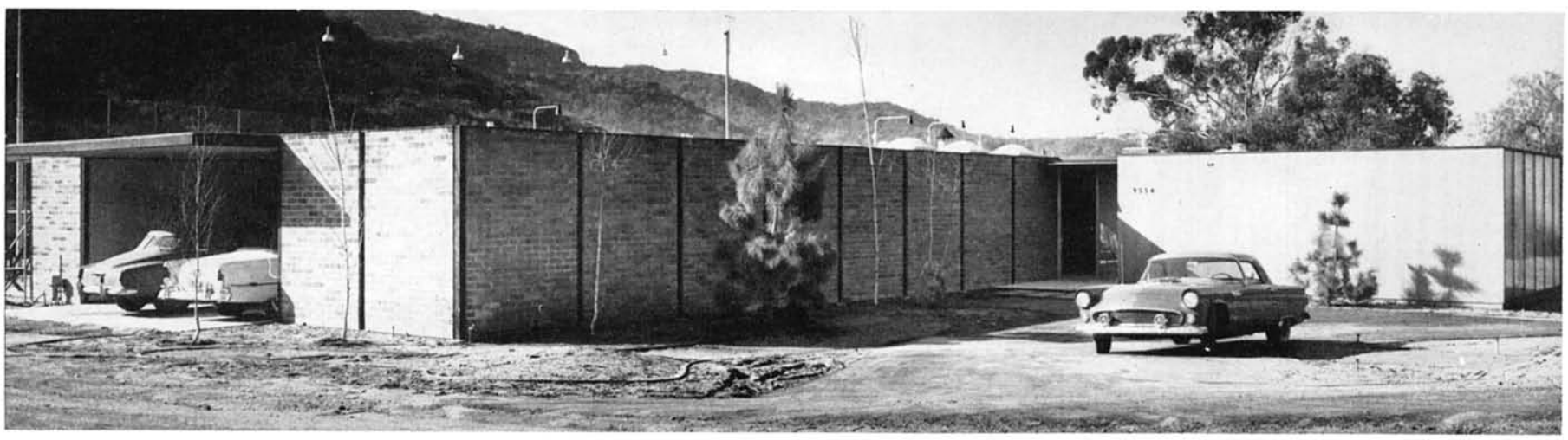
The bedroom wing excepted, all areas are directly accessible from this centrally positioned entry. To reach the bedrooms, however, it is not necessary to cross the living area since the traffic pattern is along the north living room wall away from furniture and carpeting.

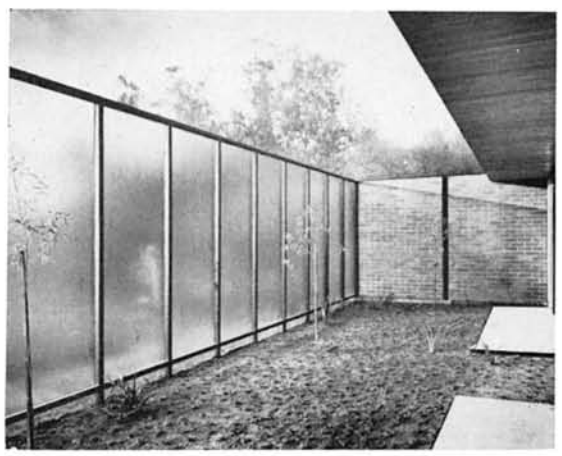
The maid-nurse room is located away from the living, bedroom, recreation and terrace areas, and is near the entry and kitchen-utility rooms. It has its own small garden court and is large enough to be partitioned in the future into two rooms if necessary. The bath here is in two compartments so guests may use a portion of it.

The kitchen-utility section is near entry, carport, service yard, dining room and the pool terrace, and is also adjacent to the recreation room which is the children's indoor play area. Outdoor play area may also be easily observed from this section. Built-in kitchen appliances include Westinghouse refrigerator, freezer, dishwasher and garbage disposer, Thermador range, twin ovens and warming drawer.

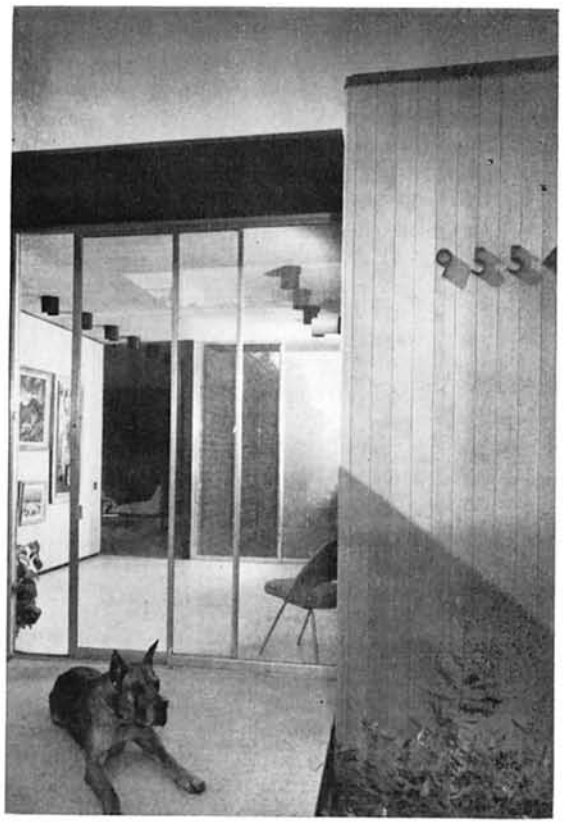
The individual Westinghouse refrigerator and freezer units have been selected for their many

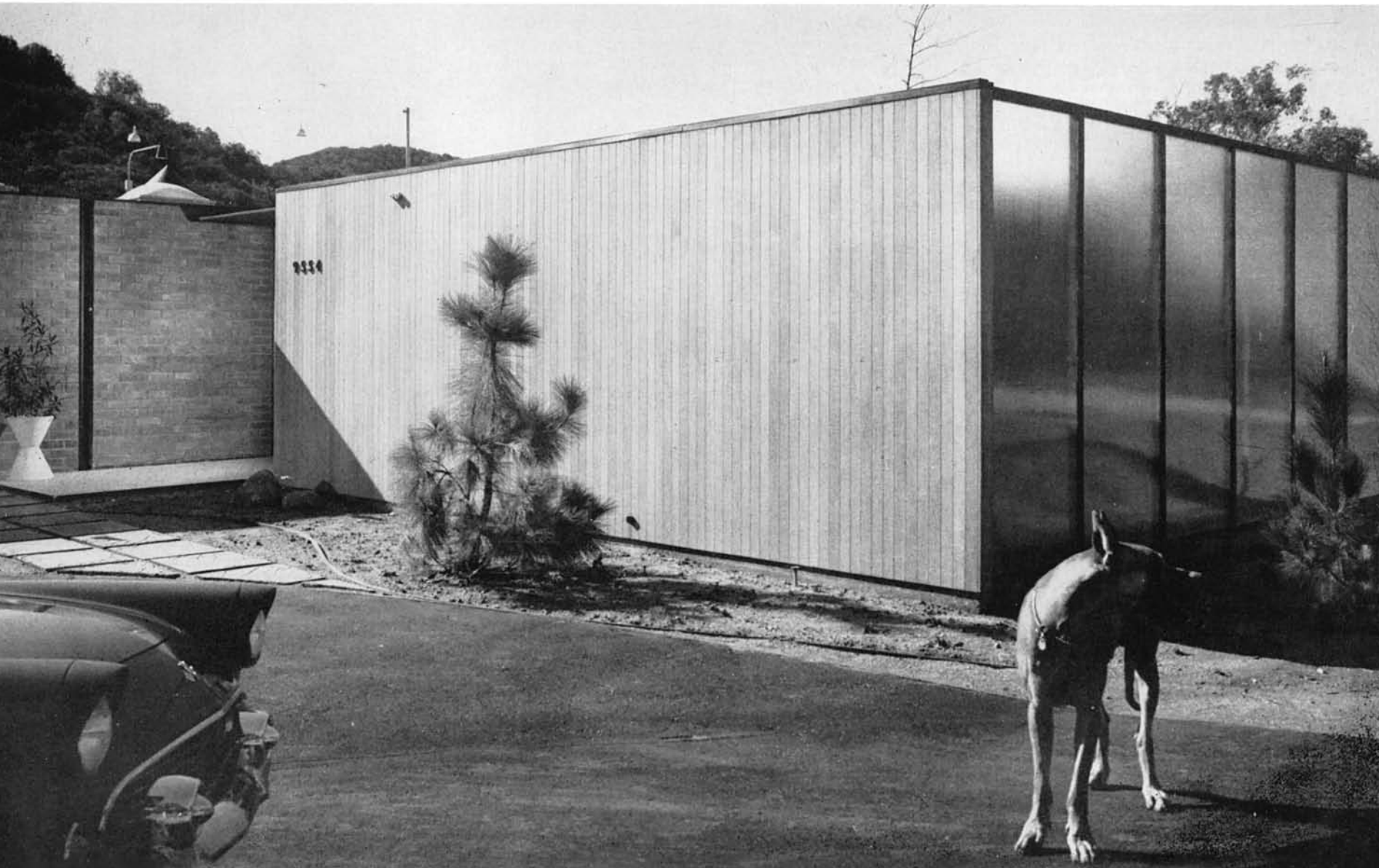


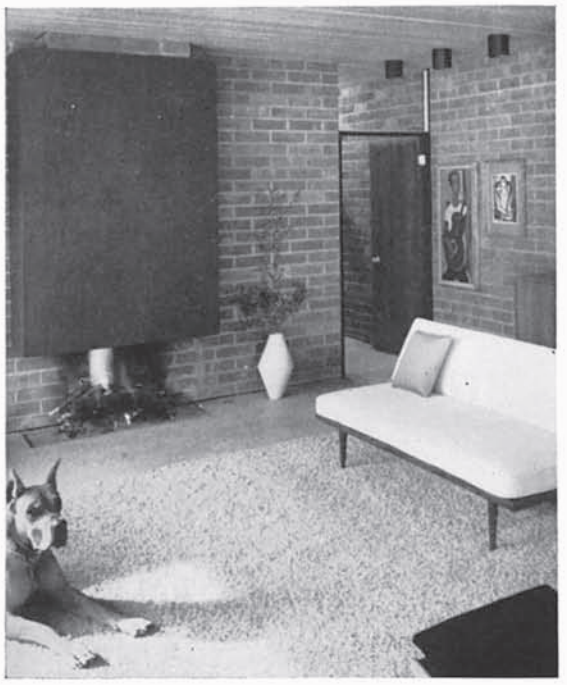


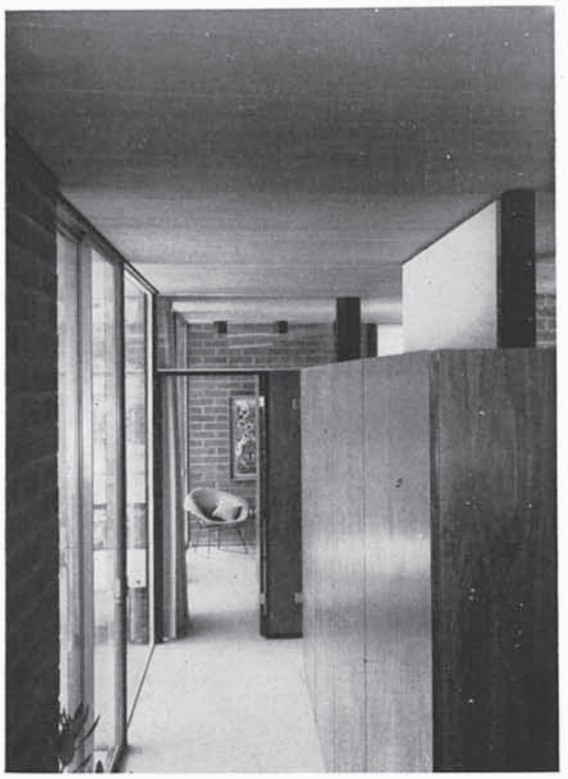


construction and design features which include vapor - sealed wrap - around construction for strength and rigidity, Lamlnar Fiberglas insulation, double self-sealing door gaskets, plastic sliding crisper doors, adjustable shelving and Thermocycle defrosting. The door of the Westinghouse dishwasher, at the left of the sink, is matched to the cabinet finish to completely harmonize with surrounding cabinetwork. This unit features automatic water heating for proper washing and sanitizing results, unsurpassed capacity, flexible control of cycle for rinsing only, rack design for easy loading without removal of racks and a new indicator dial that shows prog-









ress of cycle.

In the service room beyond the east kitchen wall are the Westinghouse Laundromat - dryer twin units, built-in side by side, flush with the wall. They will handle a very heavy load of family laundering without strain. The Laundromat has a weight indicator, and Agi-tumble washing action with single dial control on both time and water temperature. The electric clothes dryer handles eighteen pounds of damp clothes. The three-way Dry dial and three-heat Selector dial permit complete drying, damp-drying, or short time drying for the new synthetic fabrics. The direct air flow heat system insures constant use of fresh air.

All kitchen-utility cabinets are Micarta-faced Novoply, including the dishwasher unit. Novoply has been specified throughout the house because its construction of resin-coated and impregnated wood flakes and chips, fused under heat and pressure provides dimensional stability, flatness and freeness of warpage. Micarta will provide lifetime beauty, its hard plastic surface is stainproof, and its use will eliminate waxing, polishing and maintenance.

For best utilization of kitchen-utility storage units, Washington Steel Products accessories were specified. Washington pin hinges, magnetic latches, drawer guides, and pulls have been used in all the cabinetwork throughout the house. The pin hinge is ideally suited to the crisp lines of the cabinet designs. The kitchen is vented with a Pryne "Blo-fan." Pryne fans are also used in all interior baths for ventilation. The "island" cabinet in the kitchen provides additional counter work area and is an eat-

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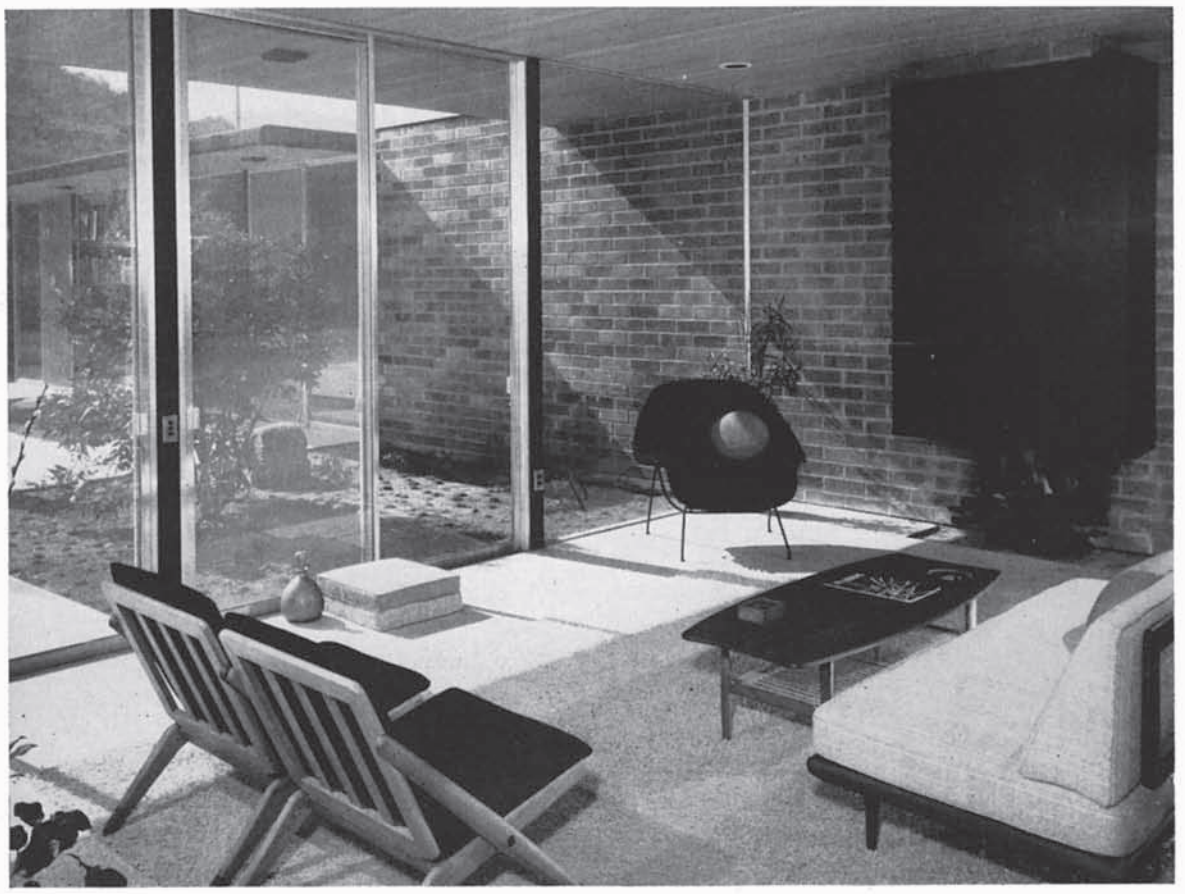
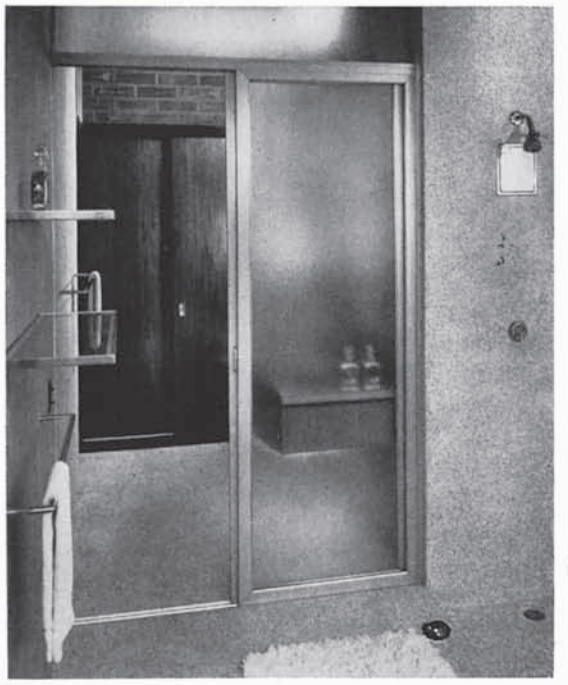
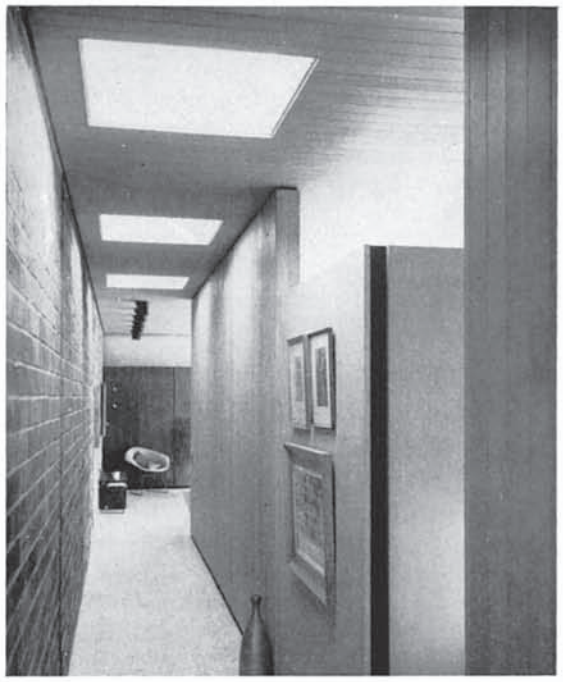
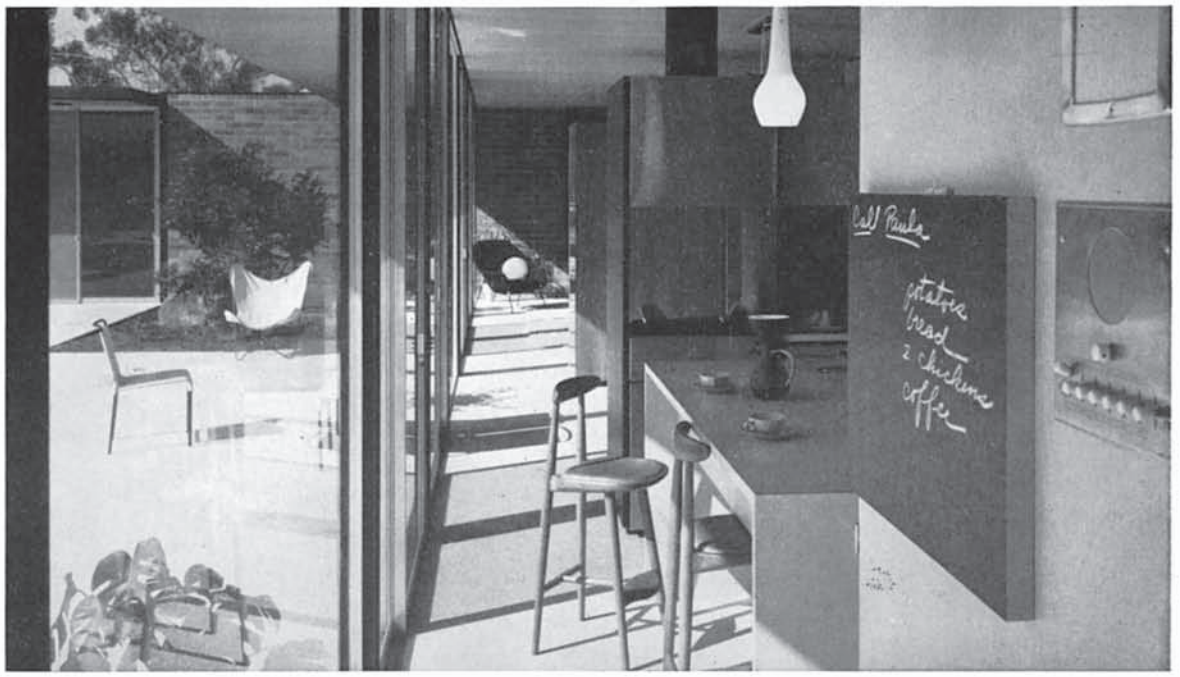






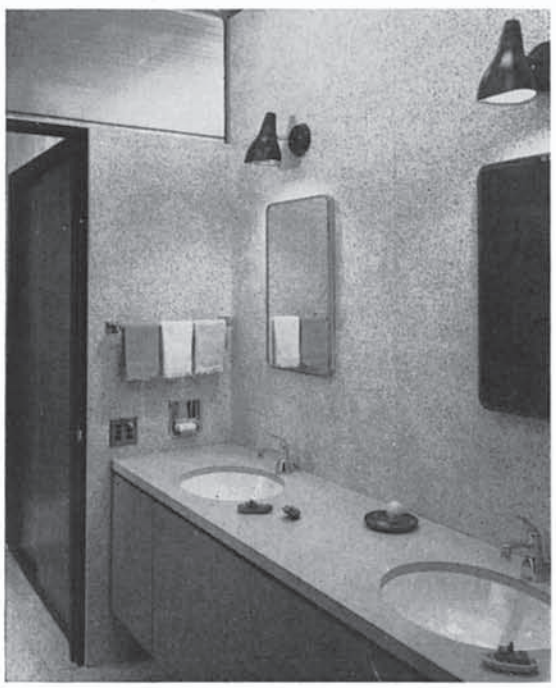


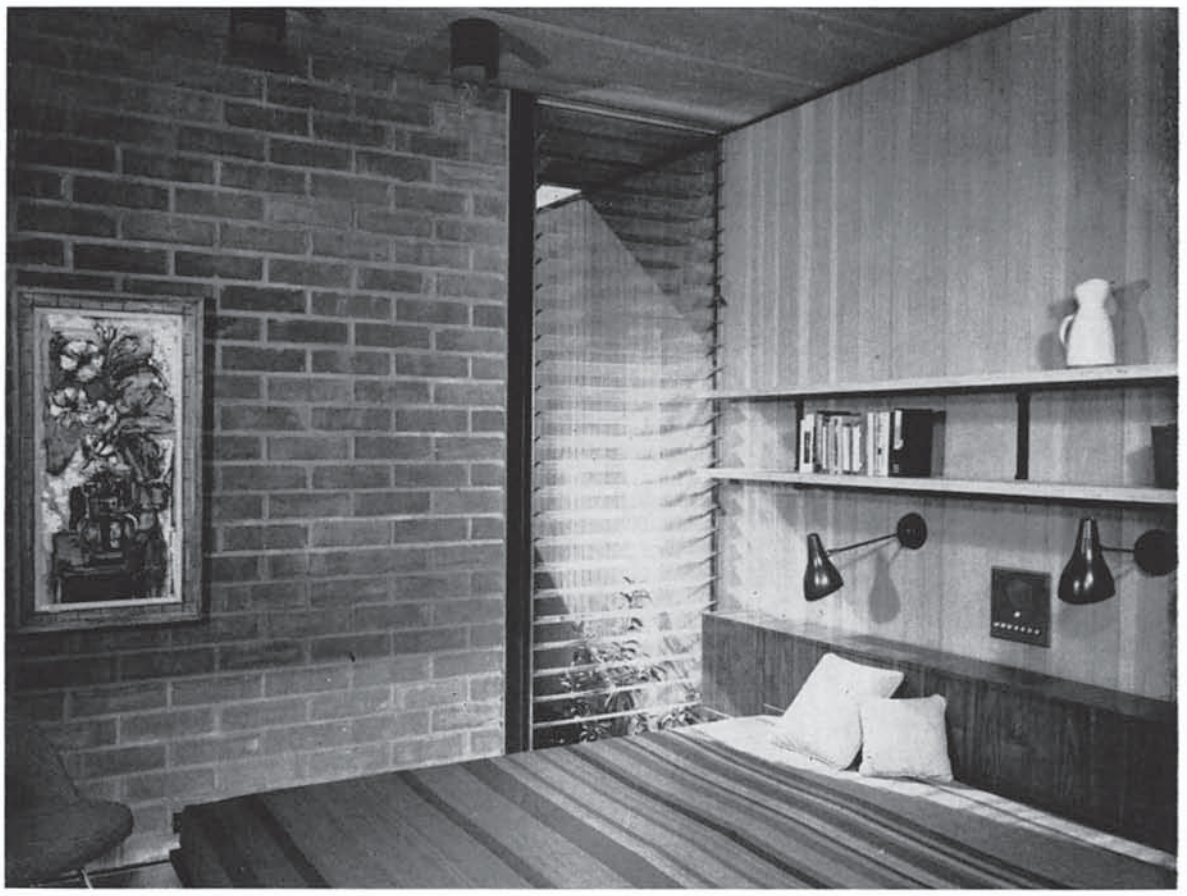
The first step in choosing the furniture was to find a style most aesthetically suited for the background and the family. The furniture was selected for its sculptured lines, its comfort and livability. Flexibility was also taken into account and the chairs and tables used can be easily regrouped or used in other rooms. Fabrics were selected for their texture and wearing qualities and the upholstered pieces were designed with removable cushions for easy replacement and cleaning. The form of the furniture against the straight line of its background emphasizes the simple structural design of the house.

A monochromatic color scheme throughout provides the background for a fine collection of paintings. A few accents of high color are achieved in pillows and accessories.

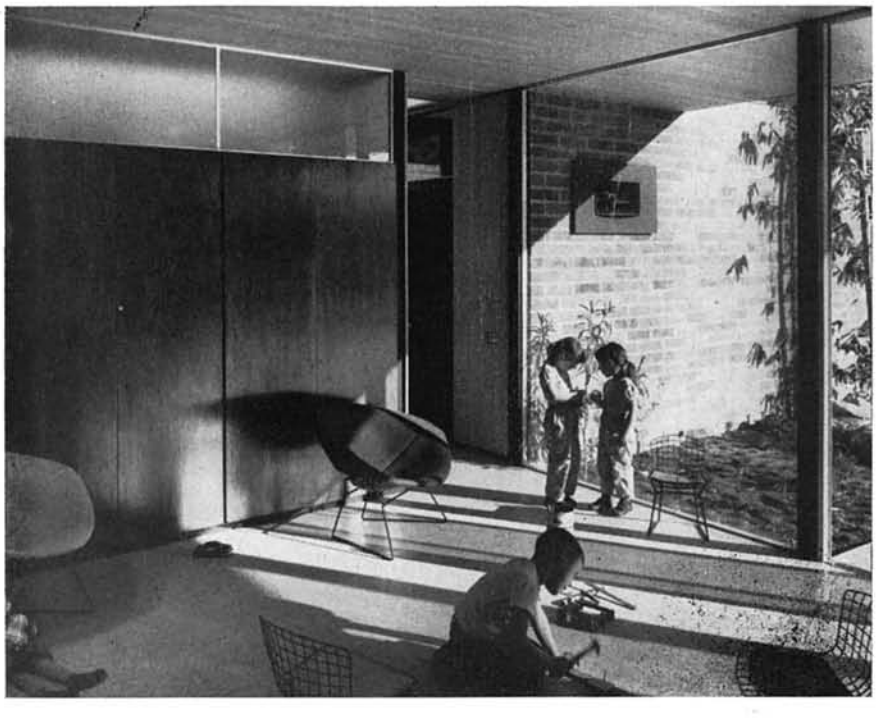
While interiors were designed to become an integrated part of the architecture, in the final analysis, they must be appraised on how well they will serve the daily requirements of the occupants and to what degree they will contribute to a constructive and enjoyable experience in everyday living.

Stanley Young for Frank Bros.





For further information on Merit Specified products see page 38



ing bar for the maid, nurse and children. For easy dining service, the west kitchen wall opens to the dining room.

A barbecue cabinet is also located between kitchen and dining areas. A Rotir barbecue unit integrated with the design allows all type of charcoal cooking. The Rotir electric spit includes nine stainless steel skewers with wood handles, stainless steel spit, crank adjustment and gear head non-radio-interfering motor with the Rotir Selector indicator which adjusts the grill to proper height for roasting or broiling. The construction of the barbecue cabinet is "sandwich" panels of 1" rigid Fiberglas insulation with "skins" of 1/8" black and stainless sheet steel. The use of steel here saved considerable space: structural masonry wall construction requires 8" thickness.

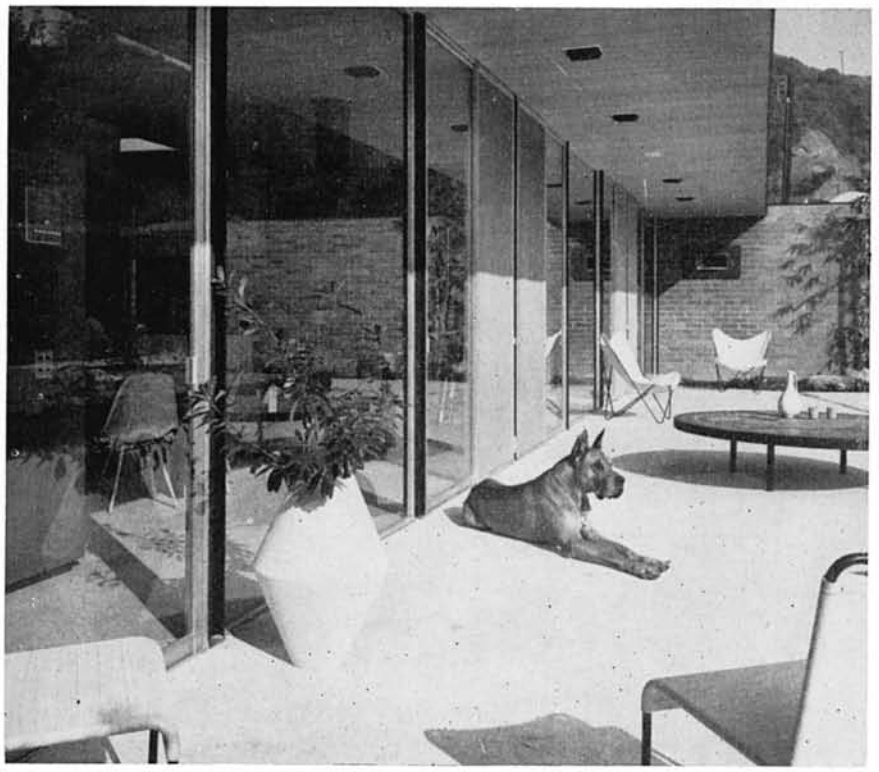
The dining room looks to the pool terrace and is separated from the living room with a 7-foot high cabinet containing storage area for dining linens and dishware. The living room side of this cabinet contains a liquor bar, Lansing Hartsfield Hi-Fi speaker and Conrac Fleetwood 27" remote control television. TV controls are located in a cabinet cantilevered from the steel columns of the north living room wall. This cantilevered cabinet also contains a Thorens automatic record changer, McIntosh record pre-amplifier and 30-watt amplifier, Concertone stereophonic tape recorder, record storage drawers and a Lansing 15" speaker for stereophonic sound. The Hi-Fi system was engineered and installed by the Kierulff Sound Corporation. Components were selected on the basis of performance, and the objective was to provide sound, either conventional or stereophonic, from all sources: tape, records, AM and FM radio. The "Realwood" Formica cabinets were designed by the architect with the technical cooperation of the Kierulff company to combine good appearance with features that assure proper ventilation and ease of operation, installation and service. Also considered was the possibility of changes or modifications as Hi-Fi art develops in the future.

Appliances in the utility section include Westinghouse Laundromat-Dryer twin units. Micarta-faced cabinetwork here provides storage units, mop-broom closet, soiled and clean clothing bins and ironing facilities.

The recreation room is multiple in purpose, serving as a general indoor play area for the children, cabana for the pool, projection room and guest room with adjacent bath. The walnut cabinet is for toy storage and also contains a Conrac Fleetwood 24" TV, Webcor automatic record changer, record storage, speaker and film projector. The projector is wired to the speaker for sound films, and the screen is fixed on the opposite wall behind accordion-hinged walnut Formica panels.

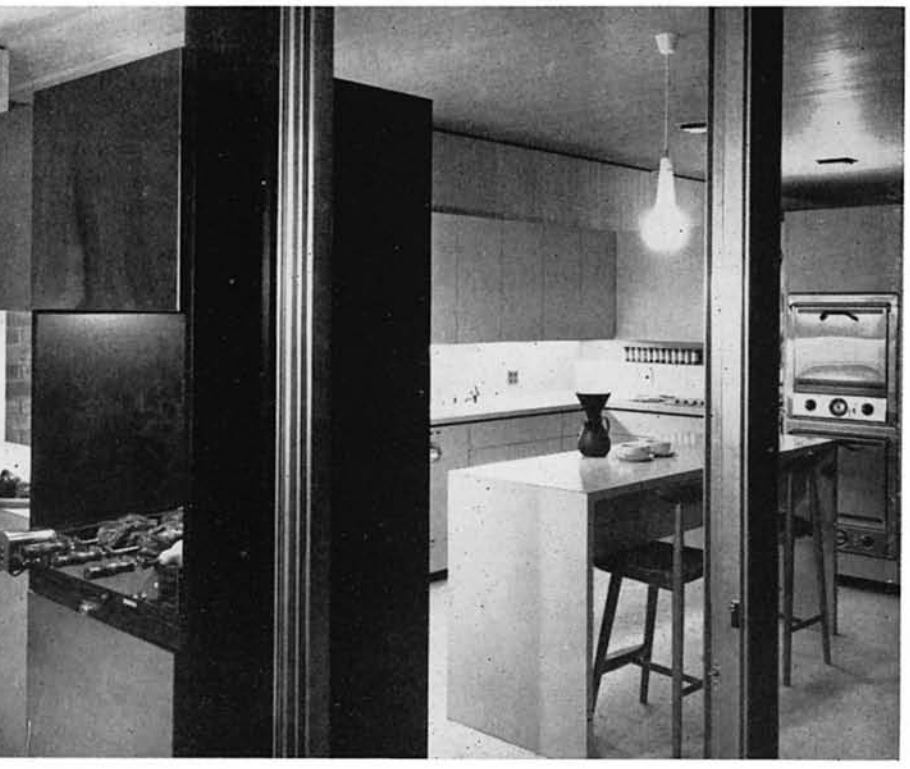
The area east of the recreation room, and adjacent to the carport, is a walled-in service yard which is easily accessible from the kitchen-utility area. A large storage room with Dormetco steel panel sliding door storage cabinets separates the recreation room from the hobby shop and pool bath. The hobby shop will be used for ceramics, woodworking and sewing, and opens to the outdoor child play area with its sandbox, slide, bars, swings and jungle-gym. The jungle-gym provides a sculptural element. This was designed by the architect and is mounted on a 20' x 4' x 7' high masonry unit which opens on the side opposite the play area for the storage of garden tools, materials and equipment. The plan of the house is such that the outdoor play area may be observed from all areas within the house. The bath adjacent to the hobby shop also serves child play area. A Crane "waterfall" fountain is mounted on the exterior wall of the hobby shop for the children.

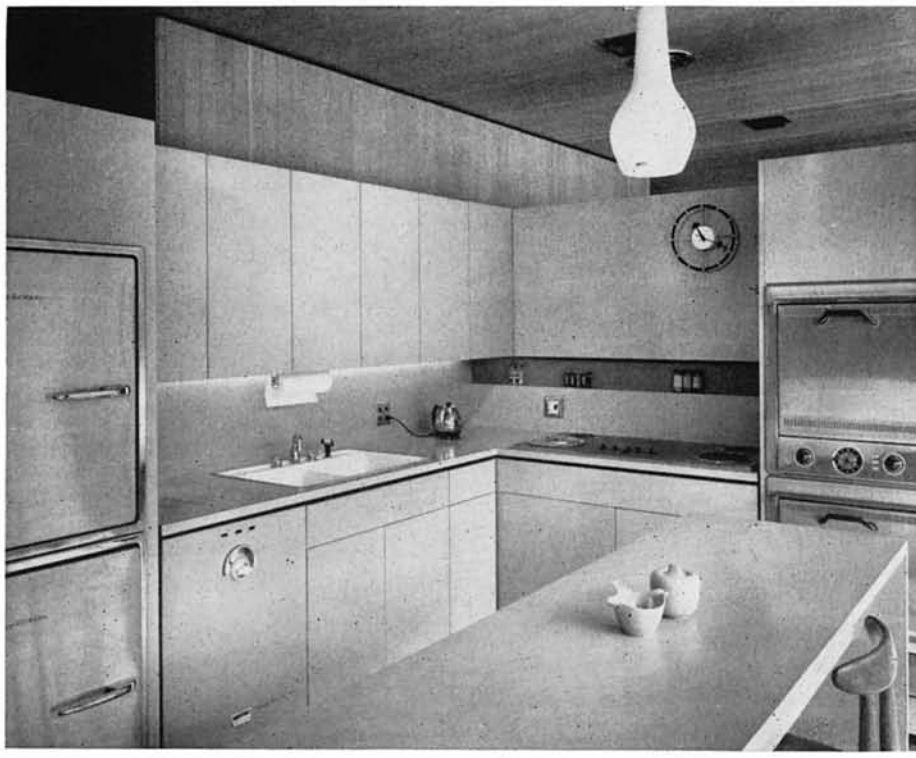
A Dalmotron Talkmaster electronic inter-communication system is used throughout the house.



This system allows the entry and service doors to be answered from several stations within the house. Also children's bedrooms may be monitored in several areas, including the master bedroom, kitchen, living-room, nurse's room and the hobby shop.

Provisions were made with the technical cooperation of the Pacific Telephone and Telegraph company during the design stage for several telephone stations. Telephone outlets are included

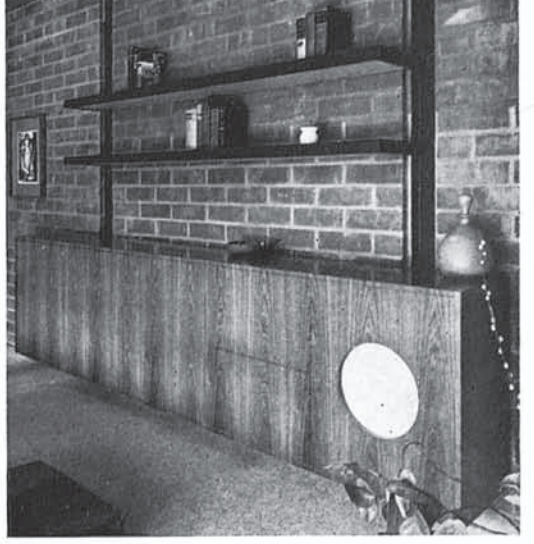


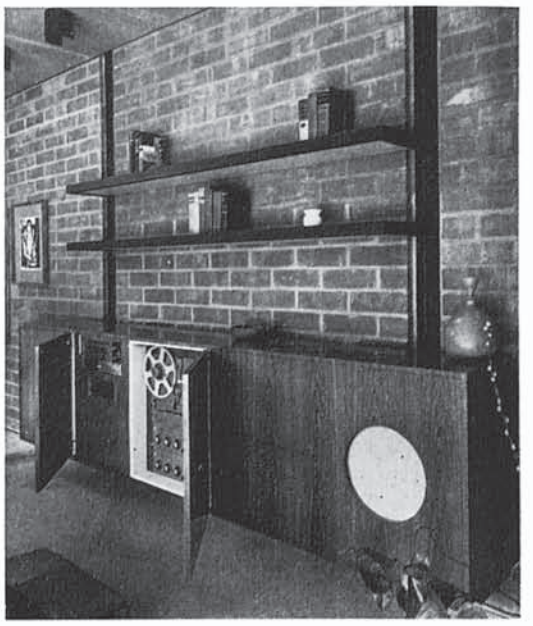


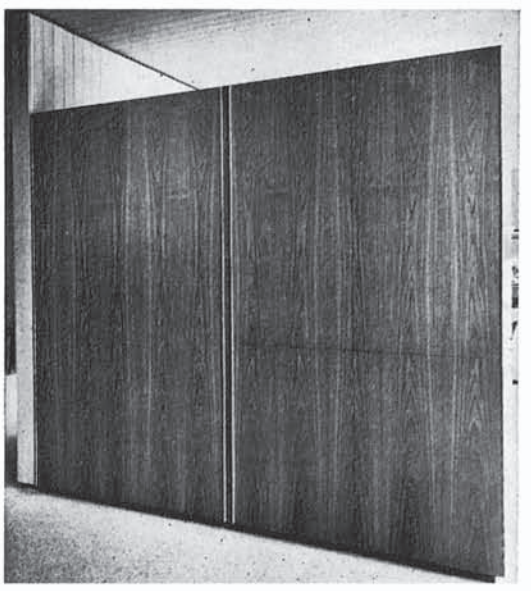
on the pool terrace and tennis court, and consideration has been given the future installation of a separate telephone for the children. The telephone instruments include the new color design.

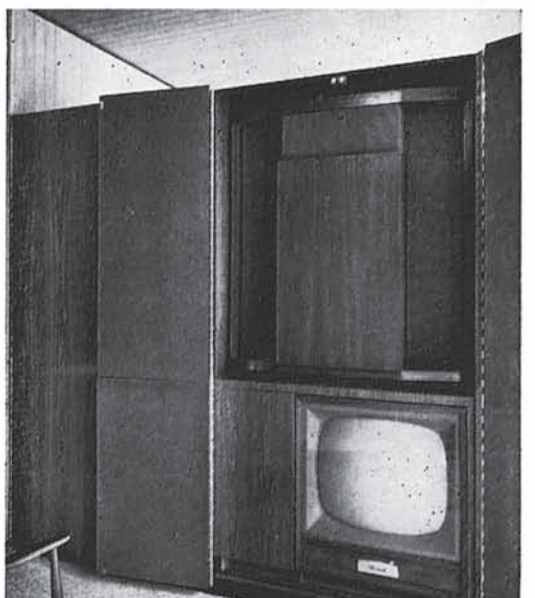
The structural framework of the house is entirely steel. Steel was selected because its use insures permanence of form, minimum maintenance, and it is not subject to moisture and termite damage. Modular rigid frames of 4″-H-13# columns and 5″-I-10# beams are designed to carry all vertical and horizontal loading, thus all walls, interior and exterior, are non-bearing. 2″ x 6″ s @ 16″ c/c span between beams and the roof sheathing is 1″ x 6″ fir, laid diagonally for diaphragm action against seismic forces. The finish ceiling is 1″ x 4″ tongue-and-groove vertical grain Douglas fir boarding. The fascia is 5″ steel channel. All steel, the columns, beams, fascias and miscellaneous steel is U. S. Steel, manufactured by the Columbia-Geneva Steel Division. The slightly higher cost of steel framing was offset by a savings in lumber: the steel system allowed the use of 2″ x 6″ ceiling/roof joists, and to maintain the same architectural detailing, equivalent wood beams would be 10″ x 10″s, requiring 2″ x 10″ ceiling/roof joists. Additional savings were effected in the masonry wall panels between columns: steel reinforcing was minimized because the steel frame is designed to withstand all vertical and horizontal loads, including seismic forces. The steel frame is integrated with the design, all steel columns throughout the building are exposed to become the basic element of the architecture. This exposed steel is painted black to contrast crisply with the natural terra cotta color of the clay block. Room partitions occur on the module, or mid-module, so that the rhythm of the frame is reflected in the division of space and again in the vertical elements. Thus there is a complete harmony of structure, plan and form.

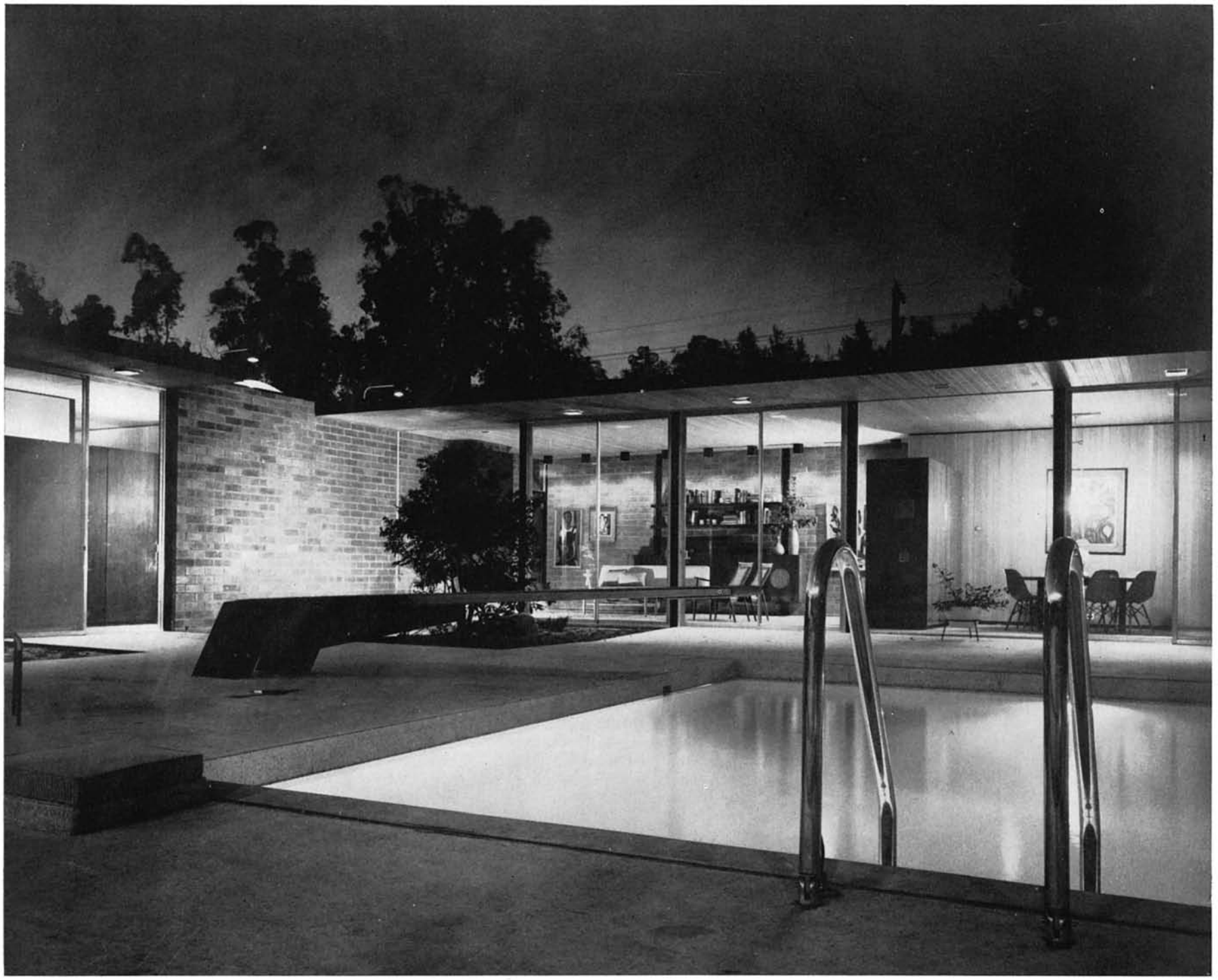
The masonry panels between the steel columns are Davidson 6″ clay block. This unit provides all the advantages of kiln-fired masonry for the same price-in-place as concrete block. Besides the natural beauty of burned red clay, these advantages include high density for strength and weatherproofing, and modular dimensions for ease of design, detail and construction. Davidson 8″ clay block is used in the fireplace wall.

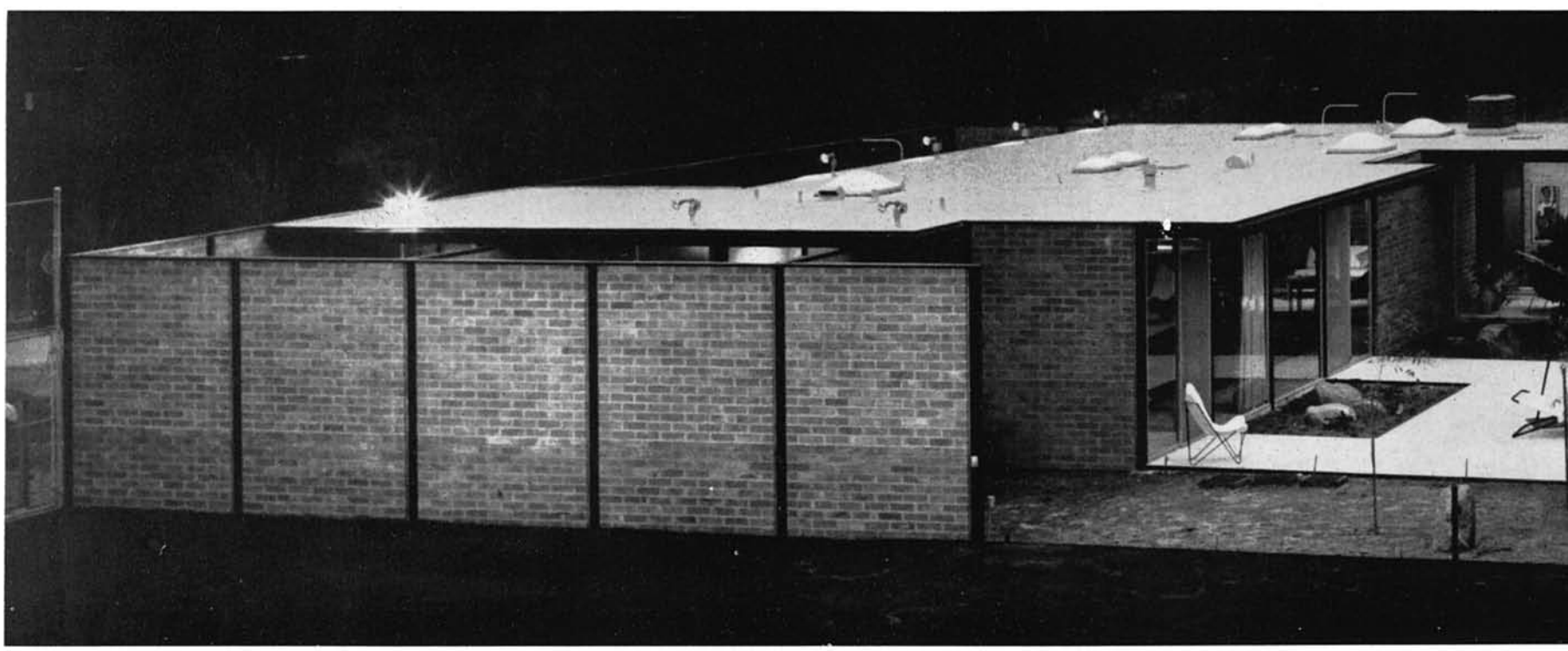












In order to improve plasticity and curing, reduce shrinkage and efflorescence, provide greater density and water repellence, and increase strength and bond, Red Label Suconem was specified as an admixture to masonry mortar and grout. This low-cost product is an emulsion of specially prepared oils, and chemicals, and the mix ratio is only 4/5 quart per sack of cement. The completed masonry walls are protected with Water Bar, a one coat silicone resin water-proofing sealer. Water Bar seals the masonry from rain and weather, prevents water as a liquid from passing into the wall but allows water to escape as a vapor. This "breathing" action retards efflorescence, because the escaping water vapor cannot carry dissolved salts to the wall surface. This product is completely invisible, and does not change the natural color

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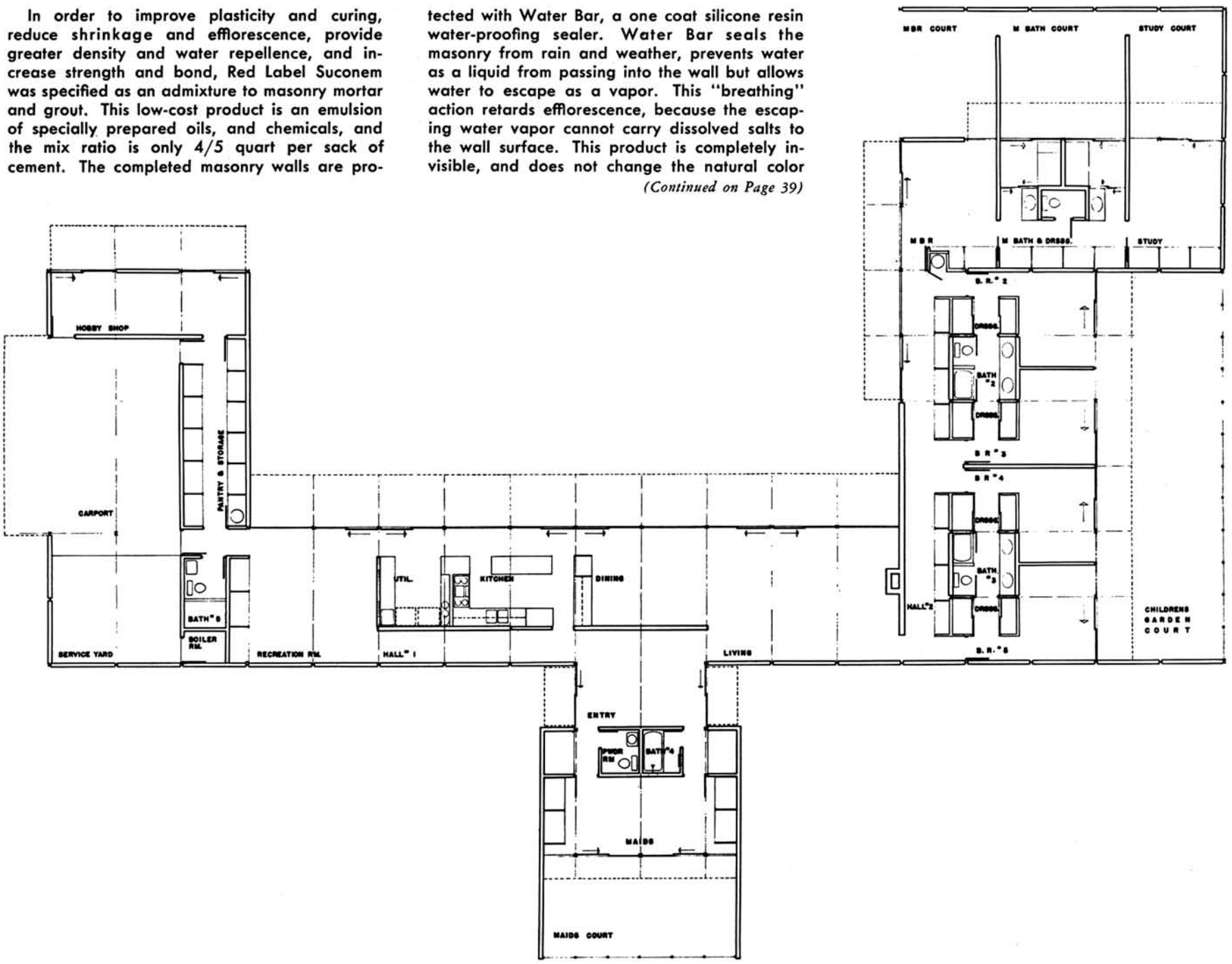
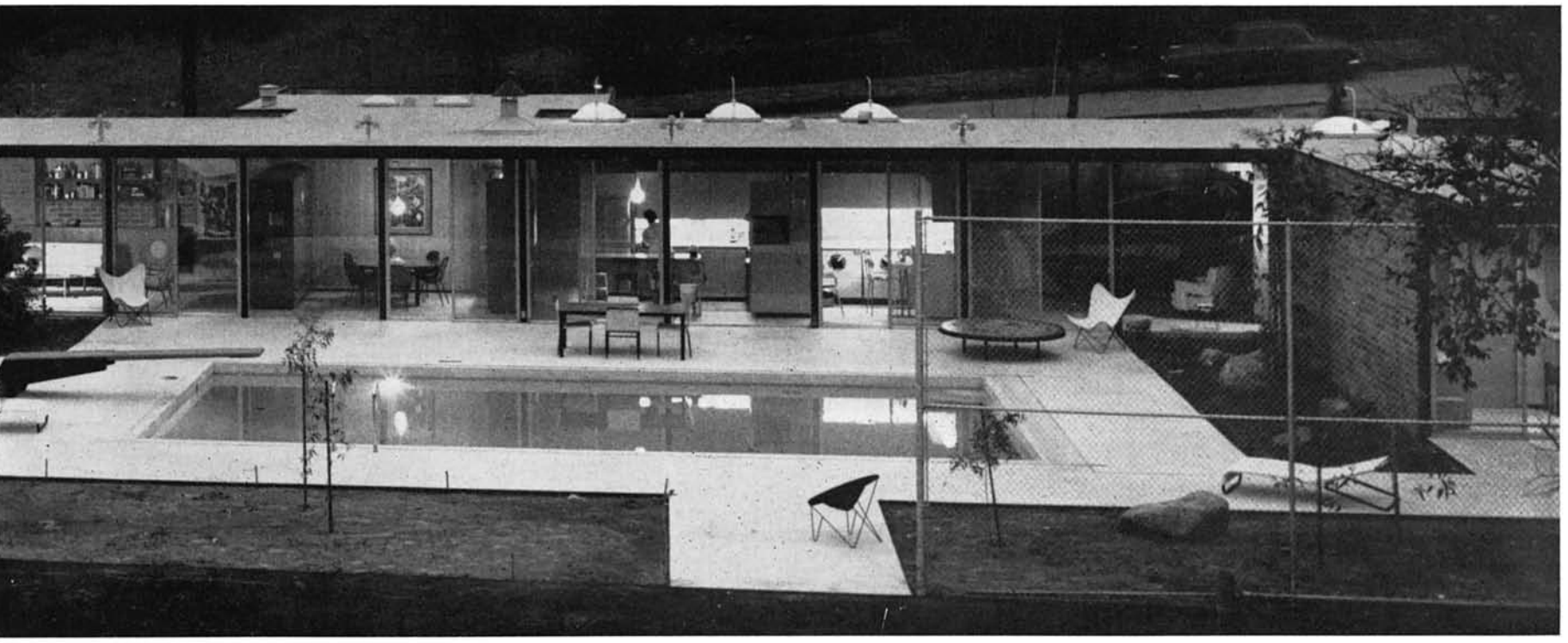




FURNITURE — JANUARY 1956

A REPORT ON THE MIDWEST FURNITURE MARKETS

BY LAZETTE VAN HOUTEN

Everything was a whopping success at January's Midwest furniture market—everything, that is, but design.

Attendance was record-breaking, sales were phenomenal, and design of any importance or significance was almost non-existent. The style hit of the session was "modernized" Italian provincial, though any number of "provincials" were bringing in the dollars. A traffic stopper was a sofa-bed that changed faces at the push of a button.

The plateau of inaction to which we have been slowly mounting during the last couple of years seems to have been reached. Possibly manufacturers have been having it too good. Possibly, too, the stimulation supplied to the industry at large by the Good Design show, now defunct, is sorely missed. All manufacturers except those most dedicated to the modern movement, seem to need a bit of sales trouble to make them receptive to a new design approach. They can all do with a little prodding and considerable guidance when it comes to modern furniture design. Left to their own preferences they'll modernize another provincial style.

Retailers, likewise, are only too happy to be relieved of trying to understand and promulgate the philosophy and esthetics of contemporary design. With "modernized" Provincial—Italian, American, French, English, Spanish—the possibilities are manifold—they all feel at home. The results look somehow familiar but the styles have been brought up-to-date. It's a dandy way out.

An interesting example of industry thinking on the modern issue is that of the firm which showed its Frank Lloyd Wright collection for the first time in the open market this January. The group is Mr. Wright's first attempt at commercial furniture design.

As the most widely publicized of any 20th century architect in this country, Mr. Wright and his distinguished work are known to a large segment of the buying public. To many people his eminence in the field of modern architecture undoubtedly gives him authority as a designer of modern furniture.

The unfortunate fact is that the pieces which Mr. Wright has been using for fifty years as custom designs for his houses do not adapt successfully to a commercial furniture line. It is not furniture which was designed originally for average income people and their houses. No amount of fiddling around with scale, proportions, decorative ornament can adapt it for this audience or make it a contribution to a developing modern movement. It is not inconceivable that the retail salesman, no less confused than the manufacturer, will attempt to sell it as "modern provincial."

Happily however there was evidence at the last market that the industry is not entirely obsessed with looking backward. There were at least two notable examples of furniture which reflects the present rather than the past.

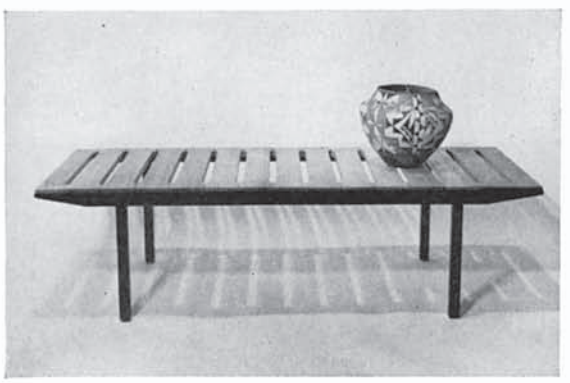
W. F. Whitney, for one, who up until this time has been engaged solely in the manufacturing of maple Colonial reproductions, brought out an excellently conceived and executed medium-priced modern line. Knoll Associates introduced a number of designs which add considerably to the selection of good contemporary American furniture.

Much, however, of what we would designate as good design on the current market, continues to come from Europe, particularly from Scandinavia. Importers are expanding their stocks as well as their bases of operation. But in most cases the furniture does not answer the need for well-designed pieces priced for the average income group.

Whatever success importers and domestic makers of high standard design may be having worries the majority of our manufacturers not a whit. They're in love with their pseudo-provincial. It's a sales hit, they say, because "it goes with everything," because it isn't one thing or the other. And maybe they're right. Maybe they've correctly gauged the temper of mid-century Americans.

If they have, their confreres, the appliance manufacturers, have guessed it all wrong. In January they showed not only how practical modern can be, but how fetching. Built-in ovens, refrigerators, freezers, rotisseries, and that newest wonder, the electronic oven, were only efficient adjuncts to charming modern interiors. No one could call them kitchens and "work area" is certainly descriptively inadequate.

If the furniture industry sits too long on its provincial plateau the appliance industry may convince modern Americans that the living room is as dead as its furniture.



ALLEN GOULD DESIGNS HAS A NEW BENCH OF SHAPED SOLID WOOD SLATS IN A FRAME OF ANGLE IRON AND SQUARE TUBING. IT RETAILS FOR APPROXIMATELY $90.

A PORTABLE MAHOGANY BAR DESIGNED BY HARVEY PROBBER HAS PLASTIC-LINED DRAWER AND A CARRARA TOP. A NUMBER OF FINISHES ARE AVAILABLE.

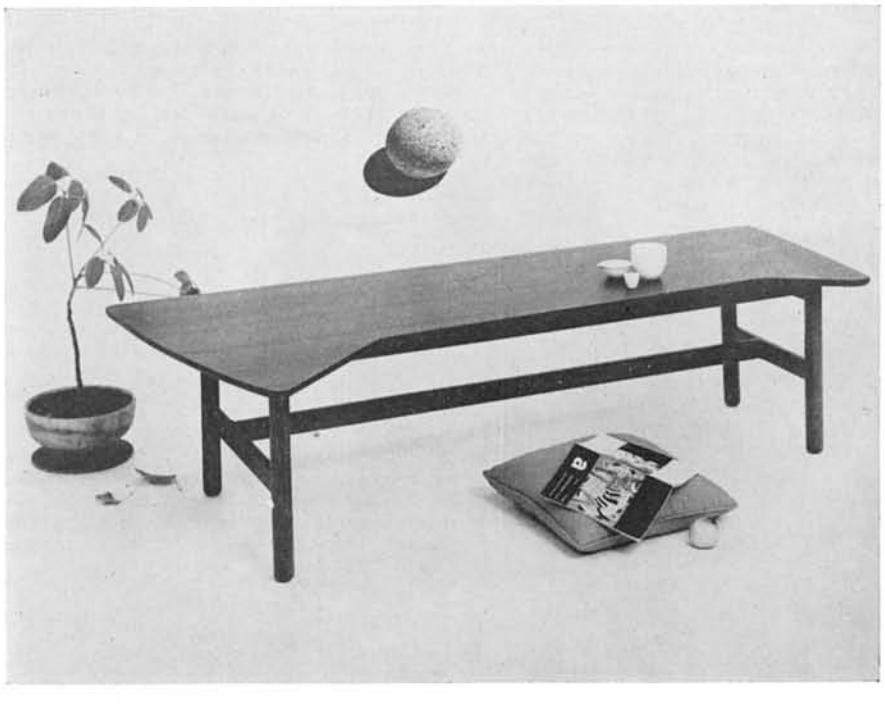
RICHARD SCHULTZ HAS DESIGNED FOR KNOLL ASSOCIATES A LOW BED WITH A NEW THIN BOX SPRING AND A TILTING HEAD BOARD. APPROXIMATE RETAIL PRICE IS $228.

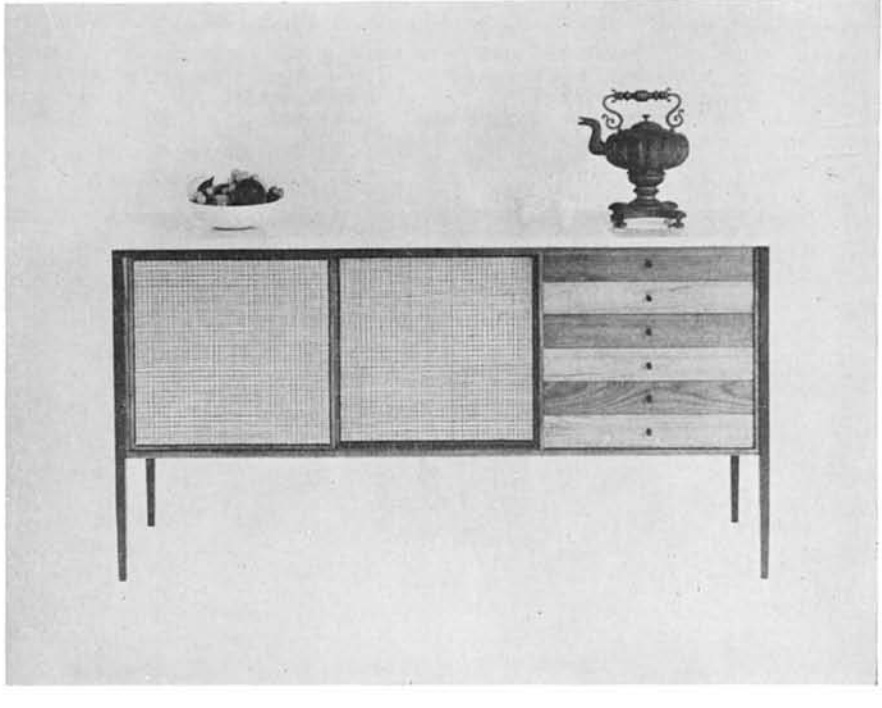
A WORK DESK-TABLE WITH DETACHABLE LEAF AND FILE CABINET DESIGNED BY FINN JUHL IS AVAILABLE THROUGH FREDERIK LUNNING INC. WOOD IS TEAK, DRAWER FRONTS COME IN A CHOICE OF COLORED LACQUER. APPROXIMATE RETAIL PRICE: TABLE, $210; LEAF, $75; FILE, $150.

A SERIES OF CHESTS DESIGNED BY THE KNOLL PLANNING UNIT FOR KNOLL ASSOCIATES COMBINES NATURAL TEAK AND WHITE PLASTIC LAMINATE IN A VARIETY OF WAYS. PIECES ARE FINISHED ON ALL SIDES. AS SHOWN HERE WITH PLASTIC LAMINATE TOP AND BACK, TEAK FRONT AND SIDES, THE 37-INCH CHEST RETAILS FOR ABOUT $231. PULLS ARE WHITE PORCELAIN.

BELOW RIGHT: TRAVERTINE TOPS THIS BUFFET DESIGNED BY MILO BAUGHMAN FOR ARCH GORDON. IT IS BASED ON BLACK METAL LEGS AND ALTERNATES TEAK AND WALNUT FOR THE SMALL DRAWERS.

BELOW LEFT: STEWART MACDOUGALL AND KIPP STEWART HAVE ADDED TO THEIR GLENN OF CALIFORNIA LINE THIS WALNUT COCKTAIL TABLE. IT RETAILS FOR APPROXIMATELY $119.





FLORENCE KNOLL HAS EXTENDED HER PARALLEL BAR CONSTRUCTION TO A SEATING PIECE GROUP FOR KNOLL ASSOCIATES. THE ARMLESS SETTEE IS AVAILABLE ON EITHER A BRUSHED CHROME OR TEAK BASE, BOTH AT THE APPROXIMATE RETAIL PRICE OF $399 IN MUSLIN.

AN EXTRA LONG SOFA HAS BEEN DESIGNED BY DARRELL LANDRUM FOR AVARD FURNITURE. IT IS 106 INCHES LONG AND RETAILS IN MUSLIN FOR APPROXIMATELY $891. LANDRUM'S NEW COCKTAIL TABLE IS ON ALUMINUM BASE AND LEGS AND COMES WITH EITHER WHITE OR BLACK MARBLE TOP. IT IS PRICED AT APPROXIMATELY $228.

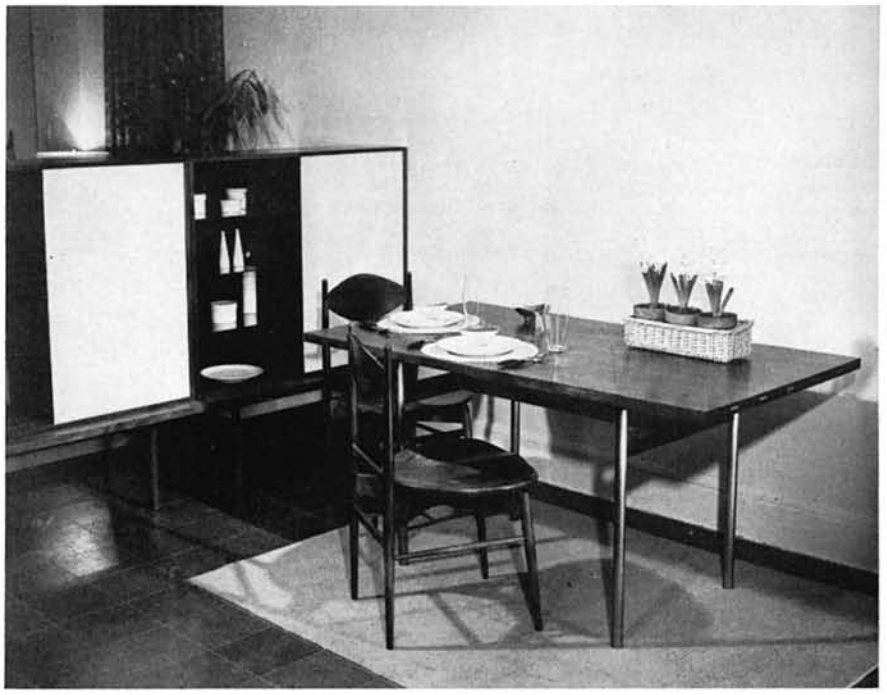
AN EXPANDABLE BENCH BY JOHN KEAL FOR BROWN-SALTMAN STRETCHES OUT TO 92 INCHES. HERE IT SERVES AS A BASE FOR NEW CABINETS; THE ONE AT THE LEFT WHICH RETAILS APPROXIMATELY FOR $105.50 HAS A SPECIAL DOOR HINGE WHICH MAKES THE PIECE USABLE AS A HI-FI CABINET OR AS A BAR. CABINET TO THE RIGHT IS PRICED AT APPROXIMATELY $87.50. FOAM RUBBER CLIP-ON PADS RETAIL IN A BASE GRADE COVER FOR ABOUT $8.

INTERNATIONAL DESIGNERS GROUP IS IMPORTING AN OAK ARM CHAIR FROM DENMARK DESIGNED BY ERIK BUCK. UPHOLSTERED IN A DANISH WOOL FABRIC THE CHAIR RETAILS FOR ABOUT $165.

JENS RISOM'S NEW "QUICK CHANGE" ARM CHAIR HAS ZIPPERED BACK AND SEAT CUSHIONS. THE BACK CUSHION SNAPS TO TOP OF FRAME. IN MUSLIN, CHAIR IN BIRCH RETAILS FOR ABOUT $98; IN WALNUT $110. THE TWO-SEATER VERSION IS PRICED AT APPROXIMATELY $186 IN BIRCH AND $210 IN WALNUT.

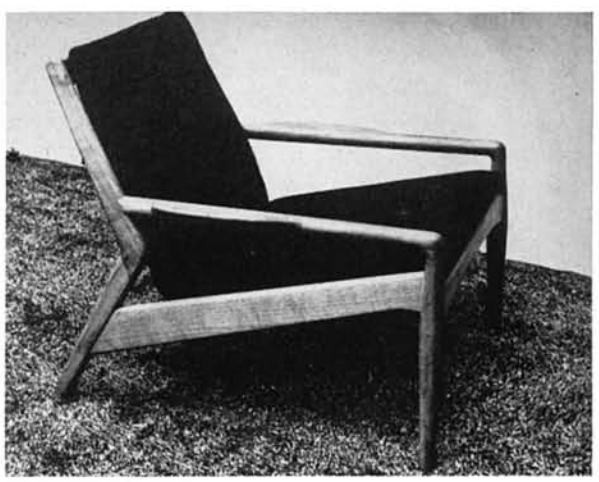
A LINE OF TEAK KNOCK-DOWN FURNITURE FROM THE NETHERLANDS IS BEING IMPORTED BY RAYMOR. ALL DRAWERS ARE MOLDED BEECHWOOD. THE STORAGE UNIT AS SHOWN HERE, TWO CABINETS AND TWO BOOKCASE UNITS, RETAILS FOR APPROXIMATELY $559. THE DESK IS PRICED AT ABOUT $225.

JOHN STUART HAS A NEW DANISH DESIGNED GROUP OF 20 TEAK PIECES INTENDED FOR USE IN LIVING, DINING AND BEDROOM. TYPICAL PRICES ARE: CHEST-DESK, $245; CABINET WITH SLIDING DOORS, $185.



THE NEW DESIGN TEAM OF BENESCH/ARNOLD HAS DESIGNED A 40-PIECE GROUP OF COORDINATED PIECES FOR W. F. WHITNEY. BIRCH FINISHED A WALNUT COLOR, PANELS OF VARIOUS COLORS OF LAMINATED PLASTIC, MOSAIC TOPS AND SECTIONS ON TABLE SURFACES, STAINLESS STEEL PULLS AND LEGS ARE SOME OF THE DESIGN DETAILS. IN THE MODERATE PRICE RANGE: TYPICAL PRICES ARE $119.50 FOR A 33-INCH CHEST; $99.50 FOR A DROP LEAF TABLE.

MAGNETIC CATCHES ON THE CANE-PANELED SCREEN FOLD DOOR AND LEATHER LINED STORAGE TRAYS MATCHED TO THE LEATHER TOP ARE FEATURED IN PAUL McCOBB'S NEW CHEST FOR DIRECTIONAL. FOUR FINISHES ARE OFFERED ON RIBBON-STRIPED MAHOGANY.



THIS WALNUT ARM CHAIR BY FINN JUHL FOR BAKER FURNITURE HAS AN ADJUSTABLE BACK OF HAND-WOVEN CANE. SEAT IS UPHOLSTERED, WOOD FRAME IS BRASS TRIMMED. IN MUSLIN THE CHAIR RETAILS FOR APPROXIMATELY $250.

PRODUCTS: CASE STUDY HOUSE #17

DESIGNED BY CRAIG ELLWOOD

The following products have been Merit Specified by the designer:

STRUCTURAL

Structural Steel and Square Tubing—Drake Steel Supply Company, 6105 Bandini Boulevard, Los Angeles. Steel produced in the mills of Columbia-Geneva Steel Division, U. S. Steel Corporation
Perimeter Slab Rigid Insulation; Wall and Ceiling Batt Insulation—Owens-Corning Fiberglas Corporation, Toledo 1, Ohio
Fiberglas Built-up Roof—Owens-Corning Fiberglas Corporation
Modular Hollow Clay Block—Davidson Brick Company, 4701 Floral Drive, Los Angeles 22
Cement—Portland Cement Association
Plastic Cement—Monolith Cement Company, 3326 San Fernando Road, Glendale, California
Waterproofing Material—"Suconem and WaterBar"; Super Concrete Emulsions Ltd., 1372 East Fifteenth Street, Los Angeles
"Luxlite" Translucent Glass—Mississippi Glass Company, 88 Angelica Street, St. Louis 7, Missouri
Skylights—Wasco Products, Inc., 87 Fawcett Street, Cambridge, Massachusetts
"Louvre Leader" Jalousie Sash—Kiener Company, 1045 Richmond Street, Los Angeles 33
Aluminum Glazing Beads—Acme Metal Moulding Company, 1923 South Los Angeles Street, Los Angeles

FINISHES

Douglas Fir Siding Ceiling and Walls—West Coast Lumbermen's Association, 1410 S. W. Morrison Street, Portland 5, Oregon
Cabinet Plywood—U. S. Plywood Corporation, 4480 Pacific Boulevard, Los Angeles
"Micarta" Kitchen Cabinets and Counter Tops—U. S. Plywood Corporation, 4480 Pacific Boulevard, Los Angeles
Terrazzo Floors, Terraces, Bathroom Walls—National Terrazzo & Mosaic Association, Inc., 711 Fourteenth Street, N. W. Washington, D. C.
Roofing Granules—Minnesota Mining and Manufacturing Company, Post Office Box 276, Corona, California.

ELECTRICAL

Telephone Outlets, Conduit Provisions—Architects & Builders Service, Pacific Telephone & Telegraph Co., 740 S. Olive Street, Los Angeles 55
Electric Switches & Devices—P. & S. Despard, Pass & Seymour, Inc., Syracuse 9, New York

FIXTURES

Plumbing Fixtures—The Crane Company, 321 E. Third Street, Los Angeles
All Valves—Moen Valve Company, Division of Ravenna Metal Products Corporation, 6518 Ravenna Avenue, Seattle 5, Washington
"Blo-Fan" Electric Exhaust Ventilators—Pryne & Company, Inc., Pomona, California
Door Locksets—Kwikset Sales and Service Company, Anaheim, California
Bathroom Ceiling Heaters—NuTone, Inc., Madison and Red Bank Roads, Cincinnati, Ohio; NuTone, Inc., 1734 South Maple Street, Los Angeles
Master Bath Wall Heaters—Thermador Electrical Manufacturing Company, 5215 South Boyle Avenue, Los Angeles 58
Custom Medicine Cabinets—Acme Metal Moulding Company, 1923 South Los Angeles Street, Los Angeles
Cabinet Hardware and Wardrobe Sliding Door Hardware—Washington Steel Products, 1940 East Eleventh Street, Tacoma 2, Washington
Inter-Communication System—Talkmaster Inc. (Dalmatron Co.), 534 Laurel Street, San Carlos, California
Recessed Chimes and Chime Clocks—NuTone, Inc.
Safe—Gary Safe Company, 1020 Crocker Street, Los Angeles

LIGHTING

All Recessed and Ceiling Lighting Fixtures—Pryne & Company, Inc., Pomona, California
All Wall-Mounted Electric Lighting Fixtures—Lightolier Company, Jersey City 5, New Jersey; Lightrend Company, 9011 Beverly Blvd., Los Angeles
Dining Room Danish "Tri-Drop" Light Fixture—Gruen Lighting, 8336 West Third Street, Los Angeles 48
Exterior Entry Lighting—Prescolite Manufacturing Corporation, 2229 Fourth Street, Berkeley 10, California
Exterior Flood Lighting—Stonco Electric Product Co., Elizabeth, New Jersey

DOORS

Sliding Glass Doors—Panaview Door & Window Company, 13434 Raymer Street, North Hollywood, California
Slab Doors—U. S. Plywood Corporation, 4480 Pacific Boulevard, Los Angeles
Master Bath Sliding Glass Doors—Acme Metal Moulding Company, 1923 South Los Angeles Street, Los Angeles 11
"Dormetco" Steel Sliding Wardrobe Doors—Sun Metal Products Company, 10555 Virginia Avenue, Culver City, California

APPLIANCES

Built-in Ovens, Warming Drawer and Cooking Top—Thermador Electric Manufacturing Company, 5215 South Boyle Avenue, Los Angeles 58
Built-in Refrigerator-Freezer, Upright Freezer, Laundromat-Dryer Twin Units, Dishwasher, Food Waste Disposer—Westinghouse Electric Corporation; Westinghouse Electric Supply Company, 4601 South Boyle Avenue, Los Angeles 58
Water Heaters—Rheem Manufacturing Company, 4361 Firestone Boulevard, South Gate, California
Electric Barbecue Spit—Rotir Company, 8470 Garfield Avenue, Bell Gardens, California

FURNISHINGS

Frank Bros., 2400 American Avenue, Long Beach, California
Garden Furniture—Van Keppel-Green, 9501 Santa Monica Boulevard, Beverly Hills, California
Air Foam Mattresses—American Latex Products Corporation, 3341 West El Segundo Boulevard, Hawthorne, California

HI-FI

Kierulff Sound Corporation, 820 West Olympic Boulevard, Los Angeles 15
Conrac—Television Set
Concertone—Tape Recorder
Mc Intosh—Amplifier
James B. Lansing—Speaker
Thorens—Record Changer
National—Radio Tuner

GARDEN

Swimming Pool—Anthony Bros., 5871 Firestone Boulevard, South Gate, California
Swimming Pool Cover—Safe-O-Matic Manufacturing Company, 33 St. Joseph Street, Arcadia, California
"Laykold" Tennis Court Surfacing—American Bitumuls and Asphalt Company, 1401 West Florence Avenue, Inglewood, California
Chain Link Fencing—Burkett Fence Company, 2419 South La Cienega, Los Angeles
Architectural Pots—Architectural Pottery, Box 24664, Village Station, Los Angeles 24
"Terracrete"—General Concrete Products, Inc., 15025 Oxnard Street, Van Nuys, California

CASE STUDY HOUSE #17—ELLWOOD

(Continued from Page 33)

and texture of the masonry.

Fiberglas insulations have been specified throughout the structure. Besides a wide range of selectivity, the many advantages of Fiberglas products include the following: glass fiber is ratproof, insectproof, verminproof, odorproof and fireproof. The fireproof quality increases the fire resistance of walls and ceilings considerably. The insulations are wrapped in vapor barrier paper to provide positive condensation control. Low thermal conductivity permits the control of heat without excessive thickness of the material and the lightness and the design of the material allows ease of handling and installation.

Fiberglas "medium" batt blanket is specified for roof and exterior wood framed wall insulation. Perimeter insulation is 1" thick rigid asphalt-sheathed Fiberglas. This perimeter insulation will greatly reduce heat loss through the exterior foundation walls and the asphalt vapor barrier will prevent moisture seepage into the slab.

Roofing is the new Fiberglas Built-up Roof Specification. This new product reduces roofing failure by minimizing blisters and cracks. The porosity of the roofing sheets allows penetration and bonding to previous layers, thus the completed room becomes a monolithic slab of asphalt reinforced with glass fiber.

Roofing granules are 3M brand Ceramic-color Stone. This stone, a new product manufactured by Minnesota Mining and Manufacturing Company, is a tough mineral rock kiln-fired with permanent pigments to provide attractive appearance and weather-fire protection. Silvertone, one of several available colors, was selected for the Case Study House.

Skylights are Wascolite Skydomes. These units are translucent acrylic plastic bubbles floated between extruded aluminum frames. The design allows easy installation after completion of roofing. There are 15 of these units used in halls and bathrooms. Exterior light fixtures are centered over the units so that the Skydomes become a source of light at night also.

The heating system is radiant hot water with four zones: living wing, bedroom wing, terrace and pool. The system is controlled with M-H electronics devices that anticipate weather changes. The U.S. Radiator boiler is cast iron. Supplementary heating in the master bedroom bath and shower compartments is by Thermador electric wall heaters. All other bathrooms have Nu-Tone recessed ceiling heaters. Recessed chimes and chime clocks throughout the house are also NuTone units.

Floor slab construction is Portland Cement concrete throughout. This type construction was selected because concrete slab floors are quiet to walk on, easy to clean, low in cost, vermin and termite proof. Also, the "on-grade" construction better integrates house and garden, eliminating steps between floor and terrace.

Concrete floors are ideally suited to the installation of radiant heat: the coils are simply embedded in the concrete during construction. Also, the heat loss factor is much less in concrete slabs than in standard floor joist construction. This provides fuel savings and greater comfort. All under-slab water piping is copper tubing, and ½" copper tube hot water radiant heat coils are placed in the top of the base slab. Finish flooring throughout is terrazzo "floated" over the base slab with ¼" sand bed to minimize cracking. The terrazzo marble chip colors are gray and beige set in white cement. To minimize changes in structural material and to completely integrate structure and garden, the terrazzo paving extends through the glass wall onto the radiant heated terrace. Again, to eliminate a change in material, the terrazzo turns down into the radiant heated pool by Anthony Brothers which has been carefully integrated into the design of the recreation area. Non-slip terrazzo surrounds the pool, and its design does not require a standard gutter. Square footage of interior and exterior terrazzo totals over 7,000. The pool will feature a new filter system that by laboratory tests eliminates 99 per cent of the bacteria from the water. Powerful underwater lights provide night-time illumination. For the children's safety an electrically operated Safe-O-Matic pool cover, of aluminum-framed canvas, is installed. When in use, the cover is capable of carrying a load of several hundred pounds; it automatically folds into a concealed underground compartment under the terrazzo terrace. This automatic cover pays for itself within a few years with savings in heating and cleaning the pool and savings in insurance rates.

For ease of construction and durability the tennis court is surfaced with American Bitumuls' Laykold emulsified asphalt which provides an excellent base, long lasting and easily maintained. To repeat the terra cotta color of the masonry a low wall of Davidson hollow clay

SAFE-O-MATIC

— FULLY AUTOMATIC —

SWIMMING POOL COVER

MERIT SPECIFIED FOR

CASE STUDY HOUSE #17

SHOWN ABOVE WTH COVER COMPLETELY REMOVED

POOL COVER AUTOMATICALLY CLOSES AT TURN OF SWITCH

SAFETY ASSURED WITH POOL COVER IN PLACE

PHOTOS BY JASON HAILEY

• FULLY AUTOMATIC

• POSITIVE PROTECTION

• LOWER HEATING COST

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