

CASE STUDY HOUSE NO. 22

---

**BY PIERRE KOENIG, ARCHITECT**

WILLIAM PORUSH, ENGINEER

ROBERT BRADY, CONTRACTOR

INTERIORS BY VAN KEPPEL-GREEN





2

We show on this and the following pages ARTS & ARCHITECTURE'S new Case House No. 22, a concept for a pavilion-type house in the most ideal setting. By understating the structure a balanced relationship has been established between house, pool, sky and view. In this project, a happy combination of site, soil, height and location combined to suggest a solution in which it was possible to take advantage of all elements without the necessity of compromising the design.

The house by virtue of its uninterrupted glass walls and an umbrella of steel decked roof, extending beyond the building line, provides a vast expanse of covered area.

Exposed steel wall decking is used to obtain privacy at the street entrance. Otherwise, the plate glass walls continue, except for slender supporting steel columns and sliding door frames, around the perimeter of the house. Major units, such as the fireplace and kitchen cabinets, are disengaged from the exterior walls and are free-standing units.

Relationship of house and pool is further established by the concrete entry walk which spans inlets of the pool at two places where the water extends up to the glass. At other points, the terraces extend into and overhang the pool area. The pool, which fills the remainder of the site,

*(Continued on page 17)*



3



1. Overall view shows relationship between house, pool and view. The use of Bethlehem structural steel sections for the rigid frame combined with T-Steel roof deck gives a feeling of lightness and continuity.

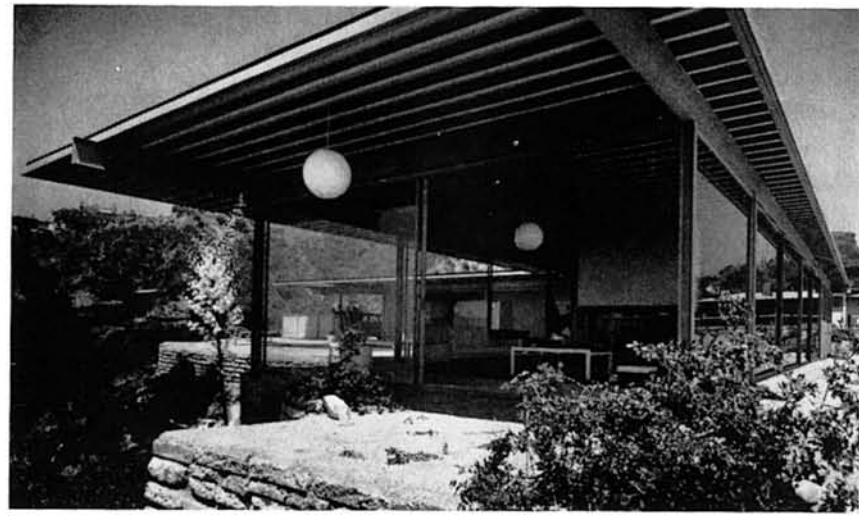
2. Looking from the master bedroom across pool to panorama below. Each glass wall is a Bellevue sliding door.

3. Unbroken wall of Robertson steel decking gives complete privacy to street side.

4. Swimming pool by Catalina Pool Company is well integrated with the terraces and the house.



2



1

1. South elevation of living area.

2. At entry with kitchen at left and living area beyond.

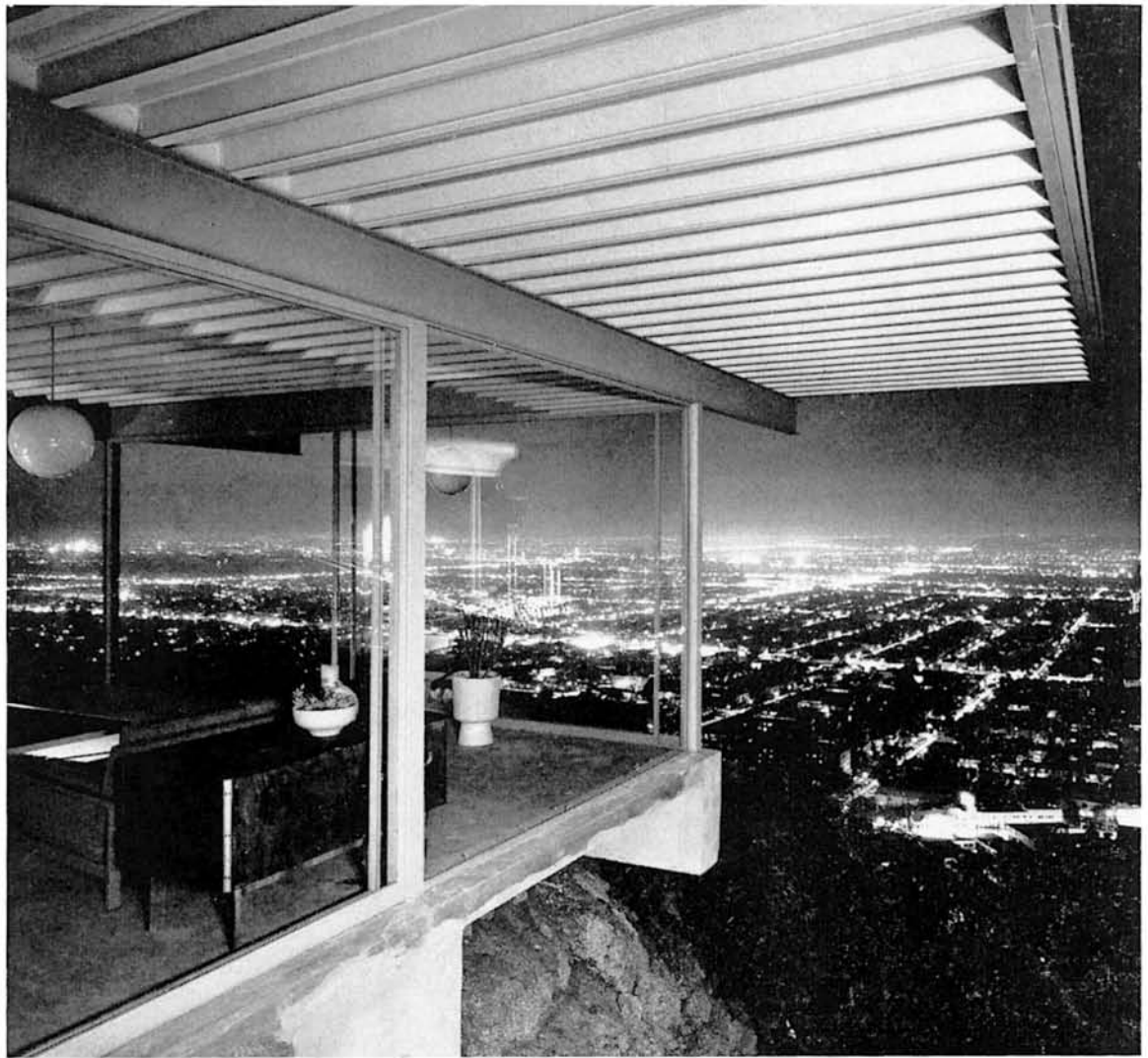
3. City lights help to show the relationship of the living area to the view. Prescolite fixtures seem to hang in space.

4. Dramatic study of cantilevered concrete beams supporting slab and steel frame.



3

## CASE STUDY HOUSE NO. 22



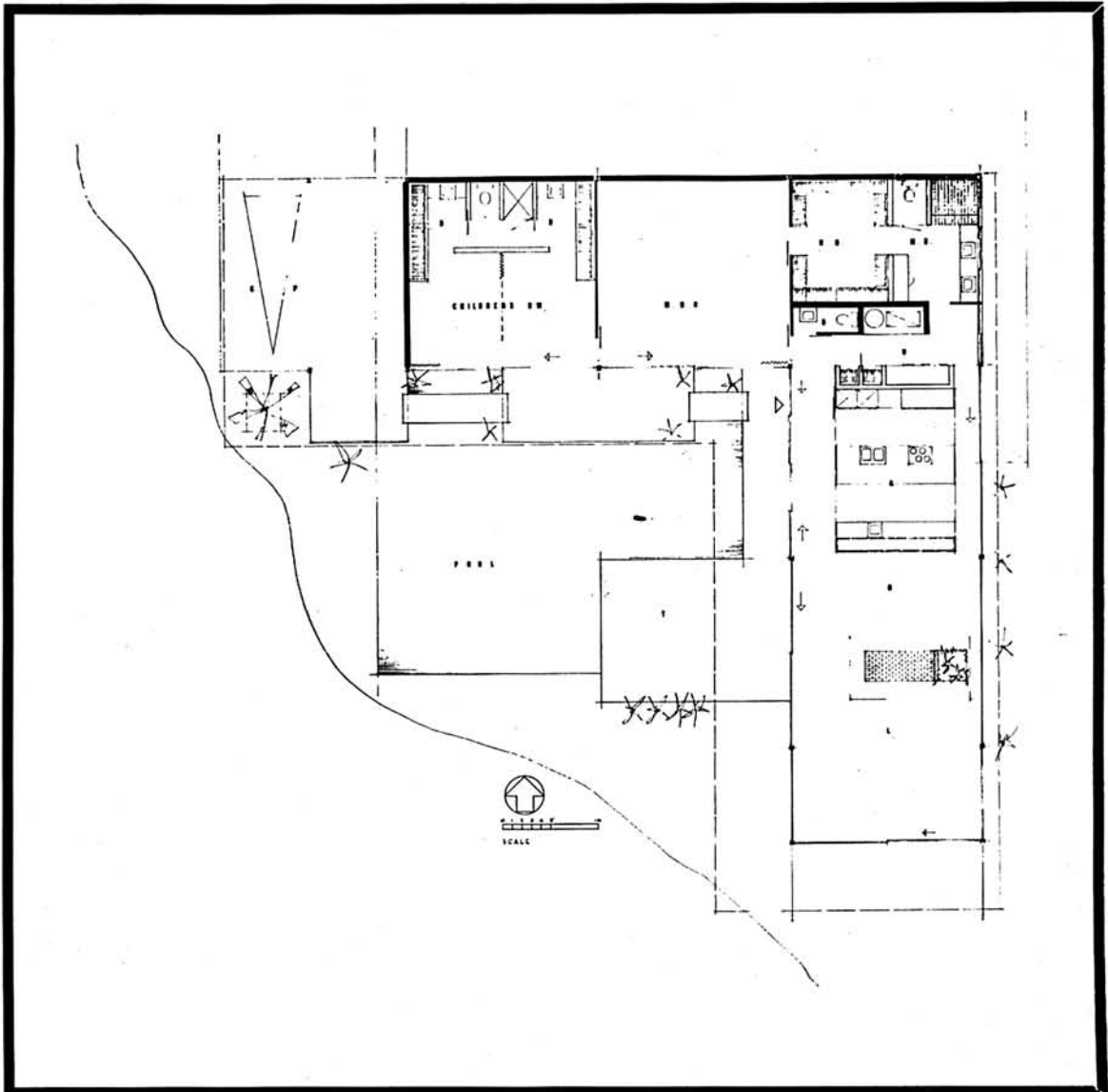
4

is close to the edge of the cliff, and water and sky blend together when viewed from a low angle.

The interior only of the house contains 2,300 sq. ft. and the entire roof deck area is 4,000 sq. ft. The plan is L-shaped to better fit the outline of the site and still have room for a swimming pool. One wing of the house is the living area and the other contains the sleeping areas, with the juncture of the two containing the master bath, service porch, and adult dressing areas. A separate bathroom is provided for the children and a third bath is near the entry for the use of guests. The children's bedroom divides into two separate sleeping areas when desired and each child has a wash basin and wardrobe. A water closet and shower, both in compartments, divide the two dressing areas. The master bedroom joins the master bath by way of a large double wardrobe and dressing area. Instead of the usual shower compartment, an extra large sunken shower without a door is provided. Double basins and a Formica counter top plus a mirrored make-up table and a private water closet compartment complete the master bath.

The area from utility room to the end of the living room is completely open except for the kitchen cabinets and the fireplace that divides the living and dining areas. The fireplace is framed with 4" steel angles and is open on four sides above a raised stone fire-box. The flue and chimney is steel and the outside panels are gypsum board. The kitchen cabinets are a new pre-fabricated product that comes on the job with welded aluminum top and bottom frames and pre-cut wood panels that all fit together in a very short time. The two kitchen sinks are stainless steel and each has a disposal. The two ovens, range top, refrigerator, automatic washer and dryer are electric.

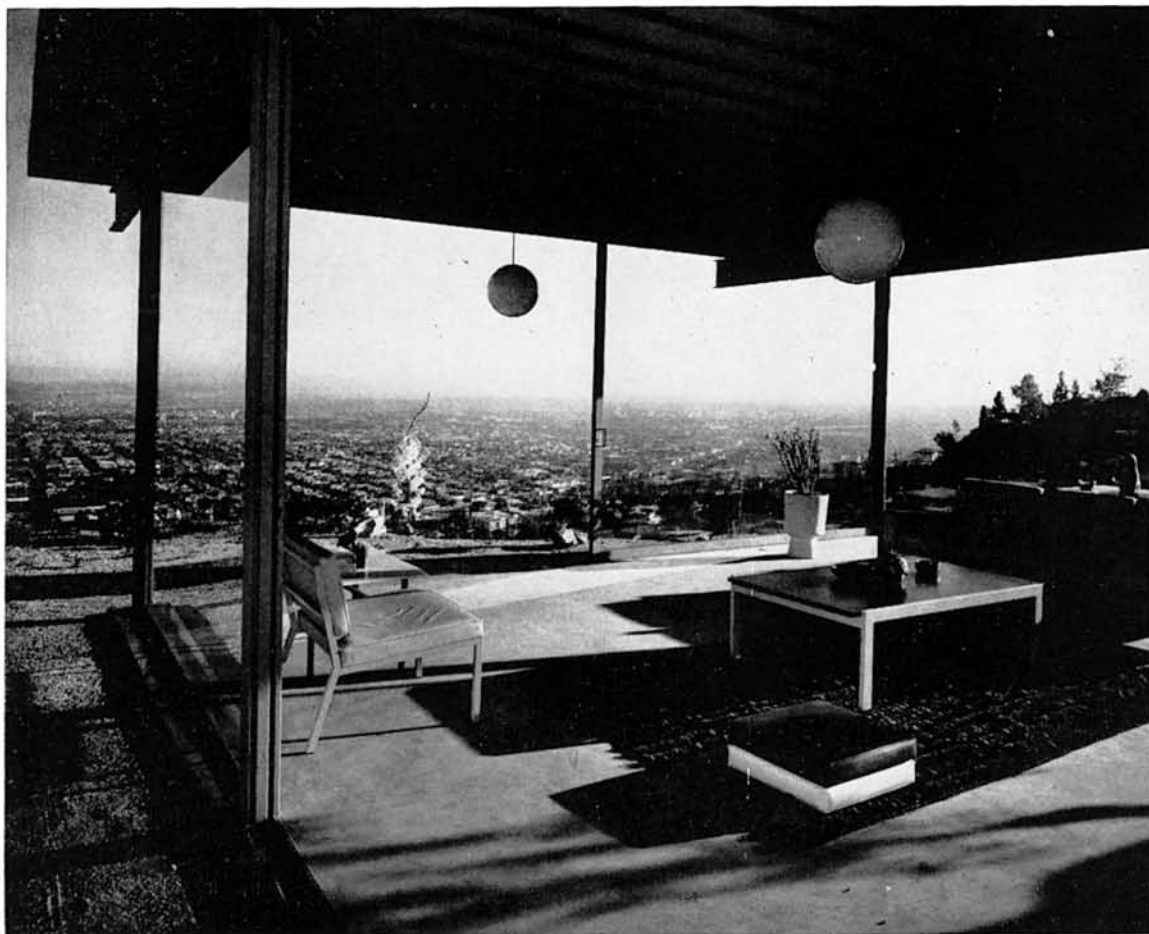
The steel frame is all welded as well as the steel sliding door frames and the steel roof





1

CASE STUDY HOUSE NO. 22



2

deck. The columns are 4" WF set twenty feet apart. They resist seismic loads as well as take direct bearing loads. The continuous beams are 12" WF set twenty feet apart thus creating a 20' x 20' bay of uninterrupted space. The five inch deep steel roof deck spans twenty feet and cantilevers seven feet over the terraces. The frame itself is cantilevered by a series of concrete grade beams tied back into the site away from the edges of the drop-off. Thirty inch deep reinforced concrete beams cantilever as much as ten feet to support the steel columns and concrete slab. In this way the footings are out of line of the natural angle of repose of the soil under the most adverse conditions.

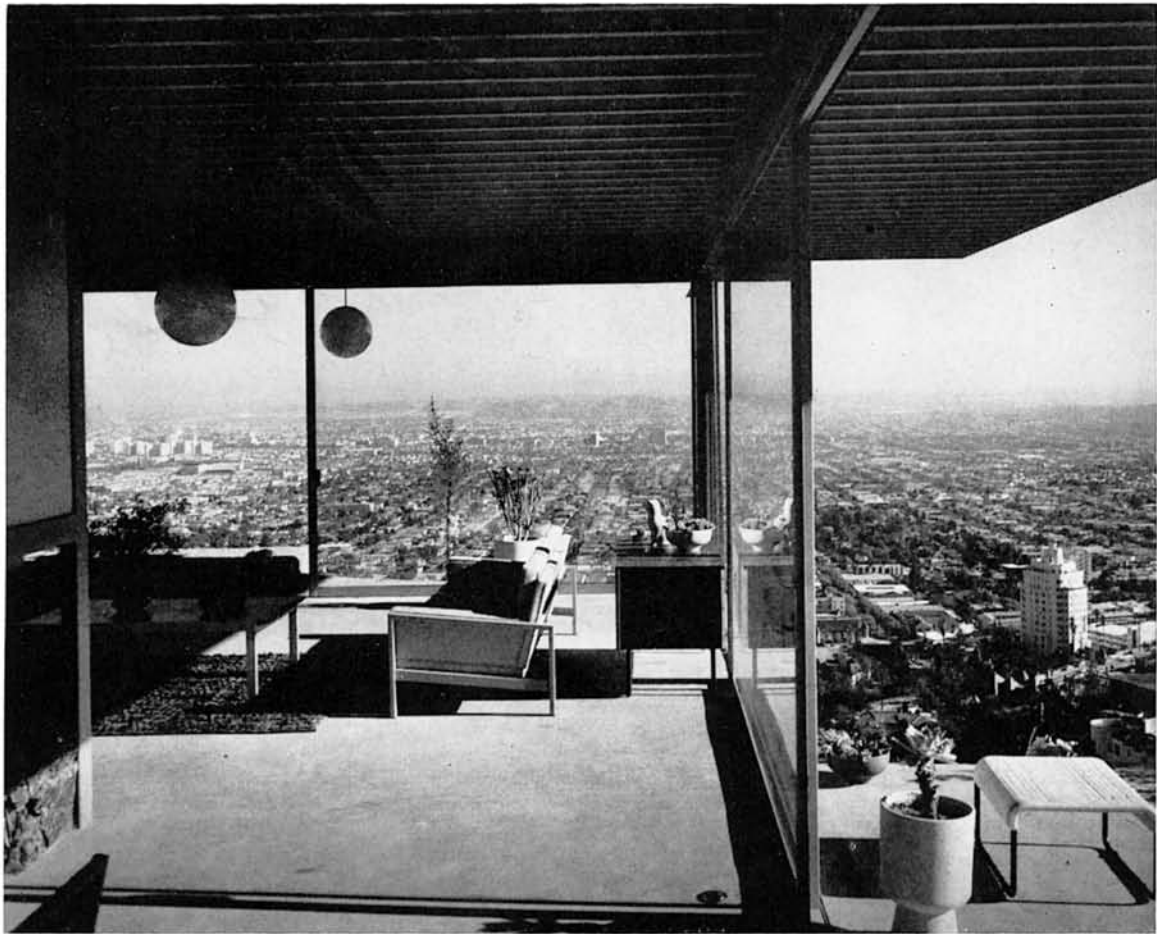
The interior finished solid walls are laminated gypsum board, either solid core or fastened to studs where wall thickness is needed. Some of the interior walls are door height with glass above to give the feeling of uninterrupted space from room to room. Gypsum board on the back of steel decking is fastened to horizontal steel girts that are welded between columns.

A long continuous storage area extends along the back of the front wall. This furs down certain portions of the bedrooms and baths and provides space for mechanical equipment.

Two inches of rigid Fiberglas insulate the roof and Fiberglas batts are in the exterior solid walls. The interior of the house as well as the pool is heated by copper radiant heat coils served by a common furnace. With every glass panel a sliding door, cooling is no problem.

The overall color is light tan and the trim its

(Continued on page 21)

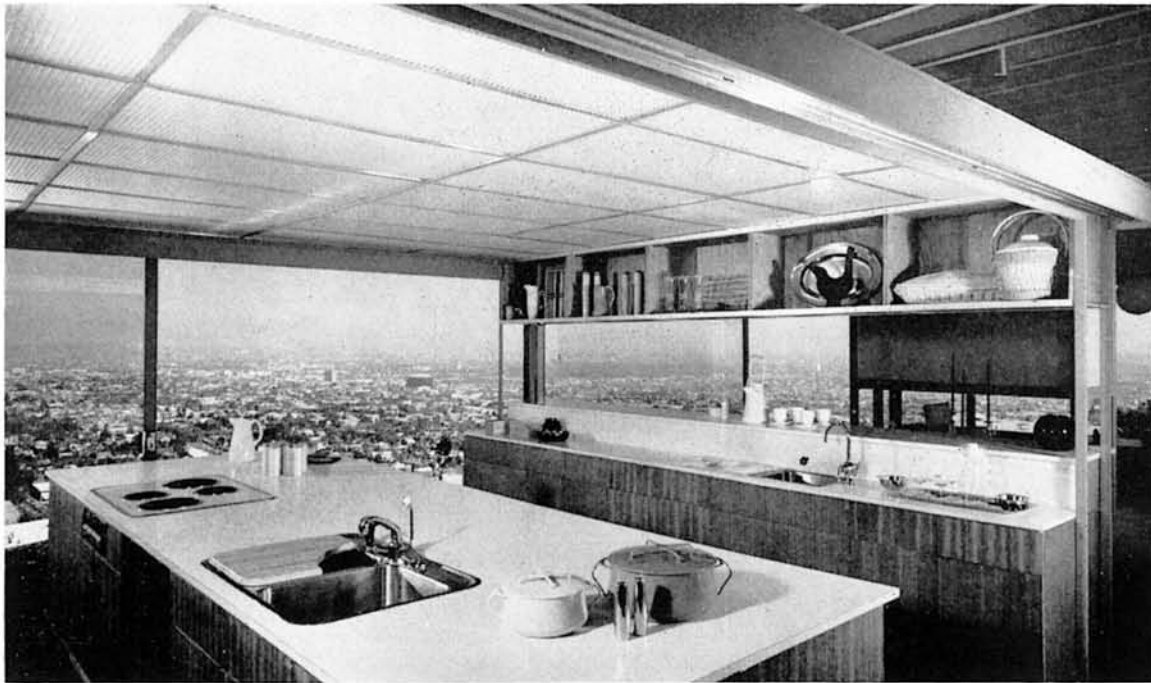


- 1. Master bedroom terrace with a sitting area adjacent to the pool.
- 2. Uncluttered furnishings and the high ceiling add to the feeling of uninterrupted space.
- 3. Wind conditions are controlled by manipulating the sliding doors.
- 4. Overall view showing the living area, dining area, and the kitchen. All furnishings are by Van Keppel-Green. The Hi-Fi units are by the A & E Furniture Company.

3

4





CASE STUDY HOUSE NO. 22

1



1. Large expanse of counter space and under-counter storage is achieved by the use of "island" type arrangement. There is a Waste Champ (Harvill Corporation) disposal in each of the two Lyon Craft stainless steel sinks.

2. Hanging plastic illuminated ceiling helps define the kitchen area and hides mechanical equipment. Sliding Glide-All doors can close off the kitchen when desired. The Arcware kitchen cabinets are welded aluminum frames with pre-cut plywood panels simply set in place.

3. Spacious master bath has sunken shower and water closet compartment of 4" x 4" glazed tile from the Mosaic Tile Company. The children's bath (not shown) is also of Mosaic tile. In both bathrooms the floor and one wall are light blue, and the other two walls a granite color.

4. Upper storage shown here in the master bedroom extends the whole length of the north wall and provides low ceiling for bed arrangement. Children's rooms are on the other side of the wall. Van Keppel-Green furniture and rugs create a pleasant atmosphere.

2

dark counterpart. The furnishings by Van Keppel-Green are keyed to the earthy color scheme.

The furniture, constructed of steel, and being made up of design elements that are architectural in scale and proportions, complements the house.

The combination of exciting materials that serve special functions also provides the decorative note of texture and color. The steel frames are finished in lacquer colors such as sage brush, Jamaica brown, white opal, and black.

These frames are ideal in strength and durability and perfect in a scale which imparts a feeling of elegance and lightness in form that can only be achieved in metal.

