View of the house from across the canal. The house sits well upon its site.

ARTS & ARCHITECTURE’S CASE STUDY HOUSE NO. 25 BY KILLINGSWORTH, BRADY, SMITH AND ASSOCIATE, ARCHITECTS

Case Study House No. 25, which has been on exhibition through all the phases of its building and shown in the magazine during the period of construction is the latest completed project in ARTS & ARCHITECTURE’S continuing program to make available to the public the best examples of contemporary housing and to demonstrate the use of new materials and techniques that become a part of the growing vocabulary of the building industry. These houses, sponsored by ARTS & ARCHITECTURE, and undertaken with the assistance of cooperating manufacturers continue to be outstanding examples of architectural design and have notably contributed to the development of domestic structures.

This house, while unique in many ways, does illustrate important common denominators in design and structure that suggest a refreshed point of view in one kind of environment. The site, through immediately adjacent to water and a beach and boating situation, is otherwise very typical of the usual mundane urban condition and the architect has very successfully dealt with the problem of the small city lot, where privacy becomes a major consideration.

This house turns in upon itself, creating its own singular quiet and seclusion; while it does not offend its neighbors, it is firmly protective against their encroachment in the general and intimate areas of the living space.

One of the primary concerns in the planning of the house was that it blend with its surroundings and become a good neighbor rather than an oddity or a solo performance. Now that the project is complete, this seems to have been successfully accomplished. Part of this is due to the 25'-0"-tall olive tree which was moved in to soften the canal facade and screen the views into and out of the house.

The house has an individual character yet does not dominate the other buildings in the neighborhood. Most of the lots in this Naples area of Long Beach, California, are 30'-0" x 80'-0" facing on 40'-0" wide canals which join with the Alamitos Bay, the Marina and the Pacific Ocean. The property on which Case Study House No. 25 was built is somewhat larger than the rest. It is 37'-0" wide at the street side and
A detail showing the relationship of the Mosaic Quarry tile deck to the shallow reflecting pool and the front door.

INTERIORS BY EDWARD FRANK, A.I.D., FOR FRANK BROTHERS

Front of house from the canal. The importance of the olive tree and the door becomes apparent. Allura-Lite floodlights by Mantrase Lighting.

PHOTOGRAPHS BY JULIUS SHULMAN
45'-0'' wide at the canal face and a uniform depth of 70'-0''
The land is extremely valuable and it was important to develop to maximum
coverage. Required setbacks of 10'-0'' on the canal side, 4'-0'' on the
side yards and 9'-0'' at the garage face reduced the available building
area to 32'-0'' x 61'-0''. In addition to these restrictions, the splay of the
property had to be accommodated. The last 21'-0'' of the 61'-0'' was
pinched in on either side. All but 174 sq. ft. of the available property
has been utilized. Most of this 174 sq. ft. was set aside for planting at
the street face of the projection housing the service bath.
Directions: To reach the house travel south on the Pacific Coast Highway from the Traffic Circle which is at the intersection of Lakewood Boulevard and Pacific Coast Highway in Long Beach. At the intersection of 2nd Street turn right. Pass over the Davies Bridge with spans the Marine Stadium and continue to Ravenna Drive. Here turn left and pass over the bridge spanning the Rivo Alto Canal. As you pass over the bridge, the house may be seen to the right facing on the canal. Continue straight ahead and park at the circle in front of the Villa De Napoli. Walk from here and return to the bridge and Rivo Alto Canal. The house is at 82 Rivo Alto Canal.

From the master bedroom the Rosenthal sculpture becomes a dominant part of the design.

The space of the inner courtyard becomes apparent here. The beige Quarry tile by Mosaic Tile acts as a base for the total composition.
The living room toward the south. The wall on either side of the fireplace is washed with light from Mora's "illuminated" fixtures set in the ceiling. In the background, the Aftertasting speakers are concealed behind grille cloth, above the white panels, on either side of the Hi-Fi cabinet.

Living room toward the north. Furnishings are simple with two Barcelona chairs, a Van Keppel-Green sofa.

Right: View from reflecting pool at the canal face toward the living room.

The owner of the house is a bachelor who travels extensively and is a boating enthusiast. However, he requested that the project be designed to house a typical family with privacy, yet providing ample space for entertaining both formal and informal gatherings. He also asked that the living room and master bedroom be located so as to take full advantage of the view of the canal. The house thus consists of a living room, dining room, kitchen, utility room, three baths and two bedrooms and a study which may be converted to a guest room with the addition of sliding screens. There is a garage and the entry will serve as a carport if two-car housing is needed.

Re-examining the original program now that the project is completed, it is gratifying to find that the house more than satisfies the requirements. The difficult problem of dual entrances and dual faces to the house has been well solved. With the introduction of the tall inner courtyard, privacy for all the rooms is maintained, yet allowing maximum glass exposure. Absolute privacy can be established by closing draperies to the canal in the living room and the master bedroom above.

Many visitors to the house will arrive by boat. For this reason the canal face of the house will become the primary entrance. Entry to the
Second floor study. The wall paneling is the teak Cado System which also supports the teak desk.

The dining room with its cantilevered table top. The bar in the background is of rosewood. The new Cervit refrigerator is concealed in its lower cabinet.

The house is by 20" x 36" stepping stones over a shallow reflecting pool to a 17'-0" high entrance door, which opens to the tall inner courtyard. This high door has caused the architects much concern. It was felt that this door was one of the primary elements of the design, yet it was possible that it could become a contrivance or a trick to achieve an effect. We find that this concern was not justified. The door is an integral part of the total composition and as it opens the volume of the 18'-0" high courtyard becomes meaningful. If the door were cut at the mid-point or reduced to a normal height, the whole concept would have been lost. Another concern was the fabrication and maintenance of the door. This was well solved by Northrop Architectural Systems who has supplied a remarkable slab door 3'-6" x 17'-0" made up of a honeycomb core with special sheets of seamless aluminum laminated on either side. The door is hung with 8 hinges and painted a grayed sepia for accent with the other colors of the house. The door has an electronic opener which is controlled at the intercom in the interior of the house.

The courtyard is 15'-0" wide and 35'-6" long.
The stair rail is of wrought-iron with a shaped walnut handrail. Terrace to the left, study in the background. The dining room is below. The three lighting controls are simply located at a 3'-0" height on all the walls.

Dining room to the left, living room to the right. The pots in the foreground are by Affiliated Craftsmen. Lighting in all the rooms is by Marco.

long with an 18'-0" height to the sunscreen overhead. This space is one of the wonderful surprises of the house. It belies its width and length and appears twice its actual size. The space becomes a handsome volume with the Rosenthal sculpture centered on the south wall of the courtyard on axis with the tall front door. This sculpture is Rosenthal's "The Walls of Jericho" which has been borrowed from the University of California at Los Angeles collection until the sculptor completes a new work designed for this wall. At the base of the sculpture a clump of Dicksonia Antartica ferns softens the juncture of materials and provides a base for the sculpture.

On either side of the south wall vertical openings give a glimpse of the stairway on one side and the opening to the street entrance of the house on the other. At the second floor a touch of the planting on the upper terrace may be seen. The floor of the courtyard and the stepping stones are the Mosaic Tile Company's 2½" x 6" Quarry tile in Hacienda beige. The shallow reflecting pool penetrates under the front wall into the courtyard and continues along the face of the east wall. The
The upper terrace from the terrace bedroom. The floor is Quarry tile by Mosaic Tile. The sliding aluminum doors are by Arcadia.

Master bedroom showing the importance of the 25-ft. olive tree to give privacy. The chair is the Eames lounge chair and ottoman from Herman Miller.
tile is suspended on a galvanized angle so that it projects 1 1/2" over the water, thus giving the deck the appearance of floating. In the pool at the east face are four pots planted with Comrasma and evergreen grape. The grape is espaliered on the tall wall to provide a green mat on one face of the courtyard. The west wall is all glass with exposure to the living room and dining room below, and the master bedroom and study above.

The total courtyard is covered with a sunscreen composed of Douglas Fir 2" x 3" members spaced 1 1/4" apart. The original intention was to cover this area with a movable woven screen, but as the project developed this did not seem to be the answer. The screen as installed is excellent. As the sun shifts the light changes. Turning from soft light in the morning to a bright lath house quality at noon, then back to the soft light as the day ends. This moving quality of light modifies all the interior spaces of the house throughout the day.

Entrance to the house from the courtyard is through Arcadia aluminum sliding doors to the living room or dining room. These excellent doors which are used throughout the house are Arcadia Products' latest answer to the problem of salt air and aluminum. They are finished in a special hard coat finish by Anadite Inc. The coating is engineered to meet

*Upper terrace showing the close relationship of this space with the stair, hall and the terrace bedroom. The chairs are by Bertoia from Knoll Associates. The sliding aluminum doors are by Arcadia and the terrace floor is Quarry tile by Mosaic Tile Company.*

*View from master bedroom through courtyard and front face of house to the canal.*

*The new Ion chair by Gideon Kramer.*
The kitchen toward the dining room. At the left the new Thermador stainless steel dishwasher is in foreground. The stainless steel sink is by Elkay. To the right the Thermador ovens are on one side of the Thermador cook top. The Kenmore refrigerator is on the other side. Counter tops and splashed are by Parkwood Laminates. The floor is Quarry tile by Mosaic Tile Company.
the extreme requirements of absolute uniform color plus durability expected to last the lifetime of the building.

The living room is 16'-0" x 26'-0" and is so located that it has a commanding view of the canal and the courtyard from which it borrows width, thus giving the illusion of a 31'-0" wide room. The floor is carpeted in a deep piled grayed cocoa carpet. The walls and ceilings are plaster. The slab above the fireplace and the hearth is walnut travertine. These are joined at either side of the fireplace by angles of oil rubbed bronze. The cabinet on the south wall of the room is of Brazilian rosewood. This case provides guest coat hanging and space for a stereo sound system with its numerous elements. There is also storage for tapes and records. Lighting in the room is by Marco Lighting's "Illumijust" which illuminates the west wall of the room in a uniform light. The furnishing of the room is very simple. It consists of two Barcelona chairs, a glass toped coffee table and a Van Keppel-Green sofa with down cushions. A beautiful, small grand piano in ebony is located in the north-west corner of the room.

The dining room has direct access to the living room, the courtyard, the kitchen, the stairway and the garage through a concealed door. The floor of this room as well as the kitchen, the service and the service bath are of the beige Quarry tile. The dining table is of white plastic laminate resting on a cantilevered chrome pedestal from the floor. The chairs are of teak with Brazilian rosewood inserts. The serving bar is of Brazilian rosewood and white Parkwood laminate. An Elkay stainless steel sink and fittings are used as part of the total design. The new Cervitor undercounter refrigerator is concealed behind the rosewood face. This refrigerator deserves special mention since it solves so well the architects' problem of an undercounter refrigerator without making a monument of the refrigerator. On either side of the bar, storage is provided for china and glass. The south wall of the room has been covered with a vertical pattern of applied bats 1/4" x 1 1/2" spaced 1/4" apart. This device was used to conceal the door to the garage which was added during construction to provide inside access to the garage.

(Continued on page 29)
**PRODUCTS: CASE STUDY HOUSE NO. 25**

The following products have been specified by the architects, Killingsworth, Brady, Smith and Associates:

### STRUCTURAL
- Cement—Portland Cement Association, 816 West Fifth Street, Los Angeles, California.
- Framing Lumber—Douglas Fir, The West Coast Lumberman’s Association, 1410 Southwest Morrison Street, Portland 5, Oregon
- Plywood—Douglas Fir Plywood Association, 1119 “A” Street, Tacoma 2, Washington

### METAL
- Sheet Metal—Bethlehem Steel Company, 6000 South Boyle, Vernon, California
- Fireplace Dampers—Superior Fireplace Company, 4325 Artesia Avenue, Fullerton, California

### ROOFING
- Insulation—Owens-Corning Fiberglas Corporation, 5933 Telegraph Road, Los Angeles 22, California
- Skylights—Skyo, Inc., 2310 Von Owen, Burbank, California
- Roofing—Owens-Corning, Fiberglas Corporation, 5933 Telegraph Road, Los Angeles 22, California

### WALL
- Plaster Grounds—Milor Metal Lath and Accessories, Inland Steel Products Company, 4807 East 49th Street, Los Angeles 58, California
- Plaster—Blue Diamond Company, Division of the Flinthot Company, Inc., 1650 South Alameda, Los Angeles, California

### DOORS AND WINDOWS
- Aluminum Sliding Glass Doors—Arcadia sliding doors, Northrop Architectural Systems, 5022 Triggs Street, Los Angeles 22, California
- Entry Doors—Northrop Architectural Systems, 5022 Triggs Street, Los Angeles 22, California
- Jalousies—Col State Louver Manufacturing Company, 2464 Fletcher Drive, Los Angeles 39, California
- Plate Glass—Pittsburgh Plate Glass Company, 1413 Crenics, Torrance, California
- Obscure Glass—Mississippi Glass Company, Fullerton, California
- Slab Doors—Regal Doors, 345 North Vineland, City of Industry, California
- Wardrobe Doors—Glade-All, Woodall Inc., 801 West Valley Boulevard, El Monte, California
- Shower Doors—Vogue Shower Door Company, 2828 Tweedy Boulevard, South Gate, California

### PLUMBING
- Fixtures—American Standard Plumbing & Heating Division, American Radiator & Standard Sanitary Corporation, 141 El Camino, Beverly Hills, California
- Kitchen & Bar Sinks—Elkay Manufacturing Company, 1400 Santa Fe Avenue, Los Angeles 21, California
- Fixtures—American Standard Plumbing & Heating Division, American Radiator & Standard Sanitary Corporation, 141 El Camino, Beverly Hills, California
- Water Heater—Day and Night Manufacturing Company, La Puente, California

### ELECTRICAL
- Switching Controls—Relner Industries, Swapco Remote Control Division, 7875 Telegraph Road, Pico Rivera, California
- Lighting Fixtures—Marvin Lighting Fixtures, Marvin Electric Manufacturing Co., 6100 Wilmington Avenue, Los Angeles 1, California
- Exterior Lighting—Montrose Lighting, 3527 North Verdugo Road, Glendale, California
- Bath Exhaust Fans—Emerson-Evans Company, 536 East 12th Street, Los Angeles 15, California
- Range Hood—Trade-Wind Division, Robbins Myers, Inc., 7755 Paramount Place, Pico Rivera, California
- Hi-Fi Equipment—Installed by Custom Sound, 2687 Atlantic Boulevard, Long Beach, California
- Alter-Lonsing, 1515 South Manchester Avenue, Anaheim, California
- Intercom System—Talk-O Communication Company, 407 Commercial Center, Beverly Hills, California

### AIR CONDITIONING
- Boiler—Bryan Steam Corporation, Peru, Indiana
- Water Chillers—Dunham-Bush Inc., 2005 West Third Street, Los Angeles, California
- Fan Coil Units—International Air Conditioning, 600 East Grand Avenue, Oklahoma City, Oklahoma

### APPLIANCES
- Kitchen Equipment—Thermador, 5119 District Boulevard, Los Angeles 22, California
- Bar Refrigerator—Corinor Kitchens, Inc., 5014 East Olympic Boulevard, Los Angeles, California
- Garbage Disposal—Waste-King Corporation, 3200 East 50th Street, Los Angeles, California
- Built-In “Food Center”—Nu Tone, Inc., 237 West 30th Street, Los Angeles, California

### FINISHES
- Quarry Tile—The Mosaic Tile Company, 131 North Robertson Boulevard, Beverly Hills, California, and Zanesville, Ohio
- Vinyl Tile—Robbins Floor Products, Inc., 320 North Robertson Boulevard, Los Angeles 48, California
- Floor Division, Armstrong Cork Company, 3083 East Smithway Street, Los Angeles 22, California
- Paint—Dunn-Edwards Corporation, 1838 South Flower Street, Los Angeles 15, California; Super Concrete Emulsions, Ltd., 1372 E. 15th Street, Los Angeles, California; Poly Faux Coatings and Chemical Corporation, P.O. Box 884, Wilcox Station, Los Angeles 28
- Countertops—Pankow Laminates, Inc., 134 Water Street, Wickersfield, Massachusetts
- Prefabricated Paneling—System Cado, 1130 3rd Avenue, New York, New York

### HARDWARE
- Door—Scharf Lock Company, 3467 West 8th Street, Los Angeles 5, California
- Cabinet—Washington Steel Products, Inc., 1940 East 11th Street, Tacoma 1, Washington

### GARDEN
- Planting Pots—Affiliated Craftsmen Studio, 8640 Alden Drive, Los Angeles 48, California
FURNISHINGS—ACCESSORIES

All furniture, floor coverings and accessories are available at Frank Bros., 2400 Long Beach Boulevard, Long Beach, California

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CASE STUDY HOUSE No. 25—KILLINGSWORTH, BRADY, SMITH
(Continued from page 27)

grain-wooded walnut and white Parkwood laminate. Counter tops are edged in 1/8" solid walnut. This was done to avoid the problem of cutting or damage to the edge of the laminate. The sink and dishwasher are on the west wall as is the Nutone Mixing Center. The refrigerator and oven are on the east wall with the cooking top between them. The dishwasher, oven and cooking top are by Thermador. The refrigerator is by Revo; the stainless steel sinks and fittings by Elkay.

The utility room is developed as a balanced plan with a water heater and pantry on either side of the exterior door. The opposite wall has broom storage on one side and general storage on the other with the Philco washer-dryer and service sink in between. The service bath features a plexiglas dome kettle by Skyco.

The second floor is reached by a carpeted stairway from the dining room. At the head of the stairs there is access through an Arcadia sliding door to the upper terrace. This terrace has a beige Quarry Tile floor and a rail formed of planting boxes planted with Raphiolepis, Jack Evans. Three tall magnolias have been set in an Architectural Pottery's Fiberglas pot 24" in diameter. From the stair there is also an exciting glimpse into the inner courtyard toward the tall front door.

Directly west of the stair is the study which will serve as a guest bedroom if needed by adding sliding screens. At present it will be used by the owner as an office. The west wall of this room is covered with the Cado System of paneled teak from Denmark. This system has an interlocking shelf arrangement for bookcases and a hanging desk. The primary view from this room is toward the tall inner courtyard. This space with its view is one of the most satisfying features of the house. The guest bath will serve both the bedroom off the terrace and the future guest room. It is provided with Glide-All sliding doors and designed in such a manner that it may also be used as access to the terrace bedroom. This bedroom is a small room but furnished in a colorful garden-like manner to tie directly to the terrace through the Arcadia sliding doors.

The master bedroom is at the canal face of the house and has an excellent view of the canal shielded by the 25'0" olive tree. It also overlooks the width of the courtyard giving a feeling of 31'0" width. The actual room size is 15'0" x 16'0". The room is simply furnished with a bed and a pair of chests on either side and an Eames lounge chair and ottoman. Clothing storage is in wardrobes behind sliding Glide-All doors. The wash basin in the dressing room is set in the white marble top of the dressing table. This has the look of furniture and not a bath. For this reason this area was left open to the bedroom allowing a further flow of space. The shower and toilet have been set in a separate compartment thus isolating this area from the rest of the bedroom. From this compartment an Arcadia sliding door opens to a tiny garden 18' deep featuring an evergreen grape vine and colorful seasonal potted plants. This area is screened for privacy by a Faktalite glass screen.

The structure of the house is of Douglas Fir wood frame and plaster. The exterior plaster has been pneumatically applied to obtain a rough texture to the large wall masses. The foundations and first floor slab are of concrete. The air conditioning and heating is by a three zone, two pipe system with heat exchangers. On the lower floor it is by perimeter subsurface ducts; on the second floor by fan units directly over the areas being served. All the interior lighting is with Marco lighting fixtures. Low-voltage flood lighting on the exterior of the house is with Allura-Lite manufactured by Montrose Lighting. All low-voltage switching control is the Swepe System by Reiner Industries. Roofing and insulation of the house is Fiberglas by Owens-Corning Fiberglas Corporation.