TILT UP-SLAB HOUSE
Venice, California, U.S.A.
Design: 1999–2000
Construction: 2000–01

Site
The house is located on a small urban corner lot, only thirty-two feet wide and eighty feet long, in Venice, California. The narrow width of the lot demanded a rigid economy of materials and the reduction of the layers of construction to an indispensable minimum.

Problem
The professional couple, who owned the property, desired to maximize the internal space to host a permanent guest, a grandparent, themselves, and their two teenage children. The urban location of the site demanded some separation from the activity outside. The clients also wished to have separate studies to conduct their business. The mixed-use nature of the residence required the design of a building large enough to provide the high number of occupants some privacy. All of this had to be accomplished on a very small lot and within the restricted budget of $270,000.

Program
4 Bedrooms, 2 Studies, 1 Family Den, 3.5 Bathrooms, Living Area, Kitchen, Dining Area, 2 Car Garage

Solution
The tilt-up house design originated from the intent to overcome some of the site restrictions, fulfill the clients’ requirements, and a desire to let the unique method of construction permeate the aesthetic of the building. In response to the multiple challenges, the architect designed an elongated interior space composed of fourteen six-inch thick tilt-up white concrete panels, lined up facing each other along the longitudinal edges of the site. Eleven panels were poured off site and then hauled in by truck while three panels were poured on site and then placed in position by connecting them to the structural steel. Through this particular construction method, it was possible to have all panels erected in just ten hours.

The lot’s corner location leaves one of the longitudinal sides exposed, revealing the structure and the connections between the panels. The almost solid facade presents a harder, urban edge towards the alley creating an effective visual and sound barrier to shield the house and its occupants from the activity on the alley. An internal ten-foot courtyard separates the garage building from the rest of the house.

Natural light and ventilation are allowed to penetrate the house through the almost entirely glazed front facade, the rear, and through the central double-height atrium, which culminates in an operable skylight. For improved ventilation, windows and doors are customized storefront aluminum which, when opened, completely disappear from inside view projecting entirely to the outside. Radiant heating in the concrete floor, powered through the rooftop solar panels, allows the house to maintain ideal interior living conditions with a minimum requirement of outside energy.

Interior finishes
The interior side of the panels is left exposed, hand sanded, sealed and waxed to preserve the simple, yet elegant material aesthetic of the exterior. A similar white cement plaster finish is applied to shower and tub surfaces. The floor is burnished concrete and the fixtures are kept to a minimum and mostly off the floor for easy cleaning. All materials and finishes are non-toxic.
地元の材料を14枚、敷地の長手方向に沿って、互いに向き合わせて設け、細長い内部空間をデザインした。11枚のパネルは他の場所で打ちたれ、トラックで搬送され、3枚は現場で打ちたれて、鉄骨に連結されて定位置に組まれた。この独特の工法により、すべてのパネルは10時間で立て上げることが可能となる。

角塀であるために長手方向の側面は露出させ、構造とパネル間の連絡部を見える。ほとんど間口のないファサードは裏通りに面して、堅い、都市的なエッジを見せ、家との仕切りを裏通りの動きから守り、現状や音に対する効果的な屋根をつくりだす。内部にある10フィートのコートヤードはガレージを家の他の部分から分離する。

自然光と自然の風が、ほとんどがガラスに包まれた正面ファサード、背後、そして中央の、開廊ができるスカイライトに覆われた2層吹抜けのアトリウムを経由して家に浸透しにくくなる。換気を促進するために、窓やドアは簡素、ショーウインドー用のアルミ製で、開けると完全に外側に突き出して、中からは見えない。コンクリート床の敷設、壁のソーラー・パネル発電によって、外部からのエネルギー使用を最小限にして、理想的な内部の生活環境を維持できる。

内部仕上げ
パネルの室内側は露出させ、簡素だが、品のある材料の美しさを守るために、手を使って砂で磨き、被膜を塗り、ワックスをかけている。同様な白いセメント・プラスチックをシャワーと浴槽の表面仕上げに使う。床は磨き上げたコンクリート、設備用品は最小限に抑え、そのほとんどを、掃除を簡単にするためから洗浄して設置する。材料、仕上げ具、品質のあるものはまったく使用しない。

Architects: David Hertz AIA Architect/Synedes Architecture—David Hertz AIA, principal-in-charge; Ken Vermillion, Neil Rubenstein, project team
Clients: Alan and Elaine Hess
Consultants: Gwayne Pugh, structural; Monterey Energy Group (Radiant), mechanical
General contractor: Owner builder and Synedes Structural system: tilt up white concrete slab walls/slab on grade foundation, structural steel moment frames, interior woodframe floor, roof and interior walls.
Major materials: exposed concrete slab walls (white cement) hand sanded and sealed, burnished concrete slab floors, white cement plaster all (showers, sealed and waxed) aluminum storefront glazing systems for doors and windows (custom designed)
Site area: 32 ft. x 80 ft.
Total floor area: 2,295 sq. ft. including garage and decks.
Cost: $ 230,000 est.