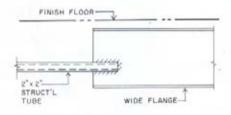
The innovative and economical structure is primarily of interest because it permits a complex building profile designed to withstand heavy seismic loads

Because the building is set into a hillside in a series of stepped floors, and because the area is particularly subject to earthquakes, the feasibility of the project might have been in severe guestion if standard (and more expensive) structural techniques were used. The problem was accentuated by the singleloaded corridors and by the weight of 18 inches of earth on the uppermost roof.

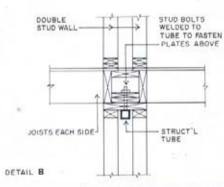
Working with engineers Spiegel & Zamecnik, Gluck developed a composite system of plywood, steel and concrete-all of which work together to obtain the required rigidity at considerable cost savings over more normal construction. As explained in the diagram overleaf, both the horizontal forces of wind and possible earthquake are resisted in the direction perpendicular to the hill by plywood and wood-stud shear walls between each room. These walls are given rigidity by careful attention to nailed connections between the wood members and by two-inch-square steel tubes which connect the walls where they overlap (see section opposite and bottom detail at right) to the steel and concrete structure of the golf-cart passages nearest the hill.

Horizontal forces parallel with the hill are primarily resisted by the reinforced-masonry walls against the hill, to which the forces are transmitted by plywood and wood joist floor diaphragms. Rotation is resisted by the shear walls. Buttresses (as shown in the section) provide stability for the retaining walls against earth forces above and below.

OJAI VALLEY INN, Ojai, California. Owner: Ojai Hotel Company. Architects: Peter L. Gluck and Associates-project team: Timothy Wood and Geoffrey Koper (job captain). Structural engineers: Spiegel & Zamecnik Consulting Engineers. Lighting consultant: Sylvan R. Shemitz & Associates. General contractor: Macleod Construction Company.



DETAIL A



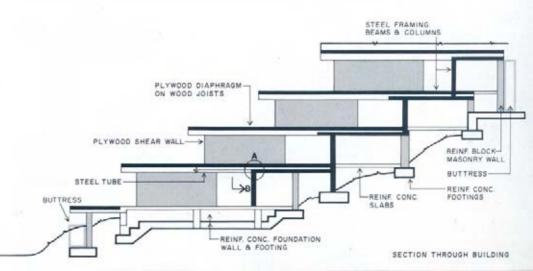


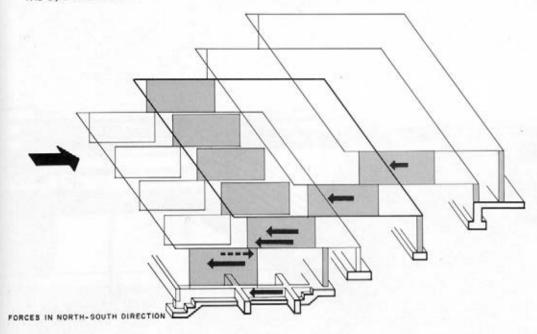


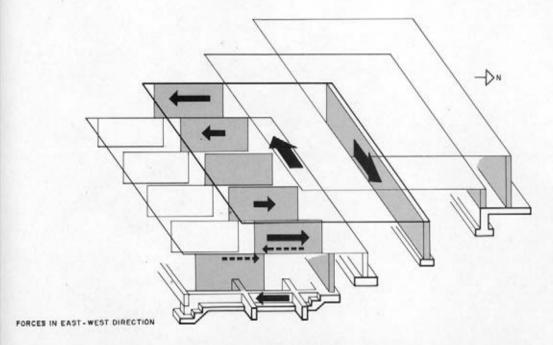


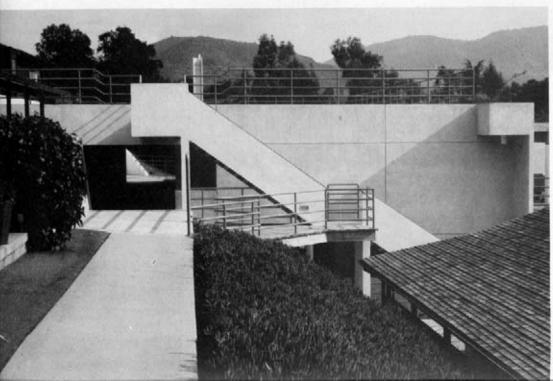


of the building are plywood diaphragms sheathed in stucco. The architects cite, as part of the substantial savings, the surprisingly light weight of timber and plywood that would-with proper care with connections-support required resistances to strong seismic forces. Structural details of the composite system are shown opposite and explain various parts of the section on this page and the diagrams overleaf. Twentyinch-deep timber trusses supported by the stud walls carry the weight of the soil required for the lawn on the roof.

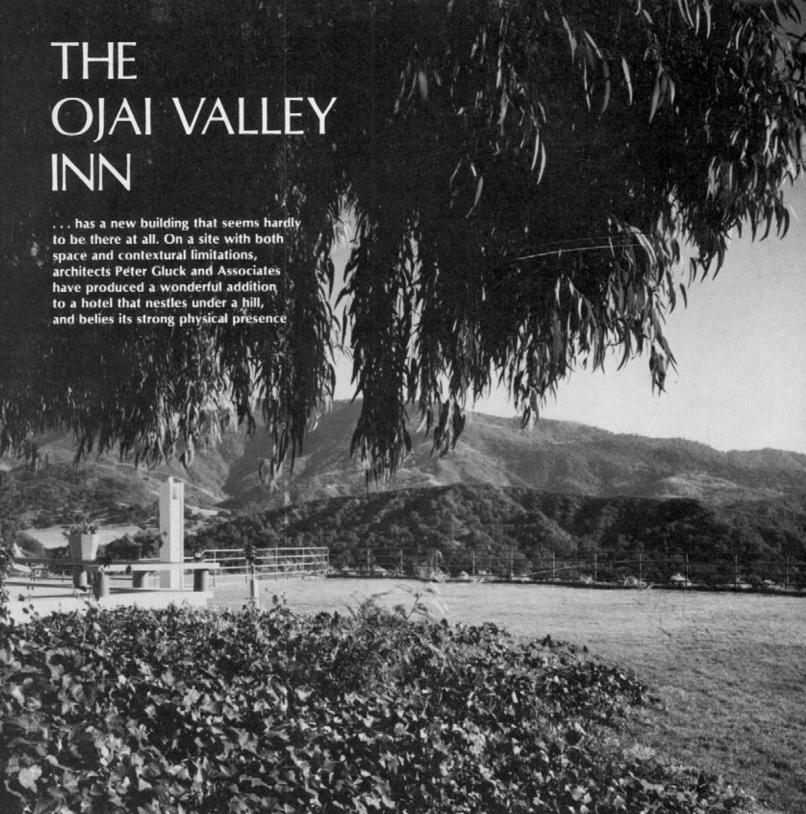








Guests riding golf carts enter the new building from the older parts of the hotel through passages like that shown in the photo below. Resistance to horizontal forces is demonstrated in the diagrams and explained in the text on the previous pages. In the top diagram, the main external force is indicated by the large arrow, and resisting forces-as they are transmitted to the foundations-are indicated by the smaller arrows. The broken arrows indicate the shear forces at each level, which are transmitted by plywood floor diaphragms. In the lower diagram, the main external force is indicated by the large arrow on the floor, and the main resistance is shown by the arrow on the masonry shear wall. Smaller arrows indicate the resistance to torsion, and dotted arrows indicate shear. Projecting sections or "lugs" on the foundations are designed to keep the building from sliding in the event of an earthquake.



Julius Shulman photos



The photo above is of the lawn outside the original building of the Ojai Valley Inn, a romantic sort-of-Spanish-colonial building, located out of view to the right, and seen in the section, overleaf. That lawn, open to its splendid southern California views, is also the roof of the first phase of a 175-room addition to the Inn, let into the hillside below. And by its location, the new building preserves the view, and exists where no new construction had been thought desirable—or even possible on its specific site. The partially-hidden location also accomplishes something else: a building that can be both a straightforward modern statement and considerate of its romantic surroundings—including the adjacent town of Ojai. (As seen in the photo at left, the town was carefully nurtured to its current well-protected and picturesque guise by developer Edward Liddy back in the 1920s.) But the new addition is not just interesting for its consideration. It also has an interesting structure that is—thanks to engineers Spiegel & Zamecnik—both innovative and economical enough to make the project possible in the first place.—C.K.H.



The planning allows the new construction to have both its own forceful character and an admirable lack of assertion

The complete addition of 175 rooms is to be built in two stages, and the current construction is shown in the left half of the plan. The rooms are stepped down the side of the hill so that each room has spectacular views and a terrace partially sheltered by wood trellises. Access to the new rooms is from "corridors" against the retaining walls at each level (to the right in the section). These passages are designed for transportation directly to the doors of rooms by golf carts, and this mode of access overcomes any walking-distance problems that might arise from the plan's extreme linearity. Frequent light wells avoid any sense of being in a tunnel.

Gluck's successful intentions have produced a building that is both a straightforward contemporary design (or-as the architect states-"hard edge") and considerate of its romantic environment. And the result is to be softened even more than by its discreet placement. The stuccoed plywood walls are topped by a series of planters at each floor level. And in time, these are to produce a camouflage of vegetation that will spread over wire nets and the wood trellises above the decks outside of each room (see rendering below and bottom photo overleaf). Eventually, the new construction will be perceived not as a new building, but as a series of new spaces, such as the outdoor stair "hall" in the photograph on the opposite page. (The containment of this space will be completed by the second phase of construction.)

The versatility of the architects' efforts to respect context is displayed by an entirely separate structure, a new gatehouse at the hotel entrance. This takes the form of a pierced wall with a cornice, and this wall conceals a functional gatehouse, which stands free behind it. Accompanied by an industrial-type lighting fixture on a stand, this composition is an exercise in historical recall, and forms an interesting contrast to the straightforward hotel addition.





Planter boxes extend across the length of each floor, and also beyond the building in a series of bridges built with plywood box beams (photo opposite). As visualized by the architects in the rendering below, growth from the planters is intended to form an eventual camouflage over the entire building, and to contain the outdoor spaces.



