

21955 Saddle Peak Road (APN 4438-038-003)
PROJECT NARRATIVE

Introduction:

The Parallelogram Case Study House, designed by Steve Diskin (architect, owner and future resident), is of course NOT a conventional house design; it's a 'case study,' an attempt to improve on the norm of residential construction using a unique plan shape deriving from the goal of lateral strength, earthquake resistance and minimal structure.

The house was designed as Type IIIB construction from the very start to address the issue of non-combustibility as well as prefabrication. The house is constructed entirely of concrete, steel and glass. The interior of the structure is basically one open space, with 3 levels of simple rectangular concrete slabs within. The floor levels are comprised of 3 rectangular floating concrete floors, totaling 3,498 square feet of living space inside a 3,182 square foot box because of the parallelogram geometry. The effect of putting rectangles inside a parallelogram also means there are triangular open/void spaces left over in the plan that are neither a floor level nor provide habitable space. An interior/exterior sprinkler system is also proposed. The exterior system on the roof will provide a cascading sheet of water that will under normal conditions be used to clean the roof of dirt, leaves and debris, and will also enhance fire resistance.

From the very beginning, the design had three main objectives:

- Energy efficient construction.
- Respect for the site conditions, especially the high fire risk.
- Fire risk mitigation/hardening using non-combustible interior and exterior construction materials.

The particular parallelogram geometry does two things:

- It dramatically minimizes material in a very lightweight, earthquake-resistant structure with no internal columns and is very stable and efficient.
- It is dramatic, but more than that, it is a very open structure visually, not a monolith that obstructs the natural surroundings.

These are some of the issues that led to the design of the Parallelogram House.

Consistent with the Neighborhood:

The neighborhood leading up to the subject property is mostly developed with single-family residences consisting of 3,800 to 4,200 square feet of habitable space. At 3,498 square feet of habitable space, this size house is typical of and keeps in character with the existing development in the area. The house next door, for example, is over 4,000 square feet.