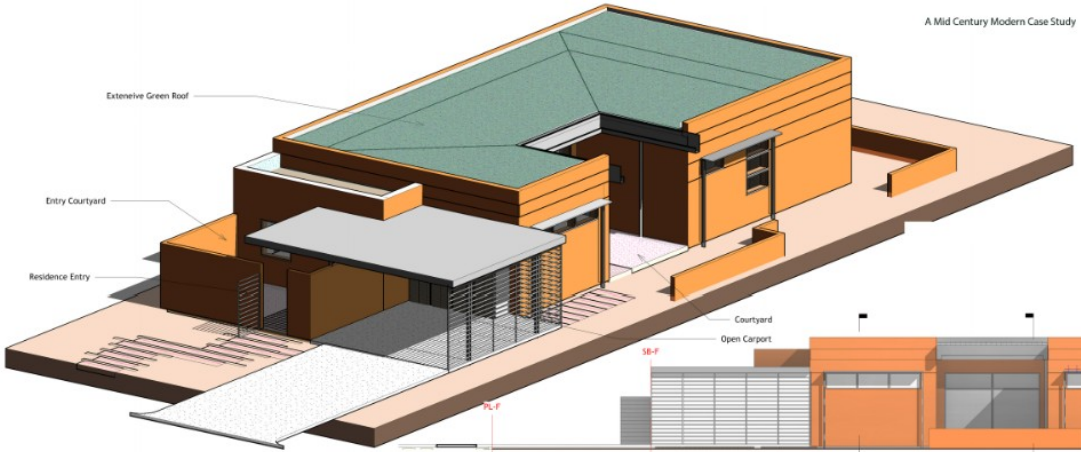
# California Rebuilds - A Passive House Design Competition

A Mid Century Modern Case Study







In response to the challenge provoked by A Passive House Competition-California Rebuilds and the recent devastation of the Los Angeles wildfires:

This project is a response to the brief for California Rebuilds - A Passive House Design Competition to design new and innovative housing prototypes for the Pacific Palisades and Altadena communities. This project, taking inspiration from the LA Case Study houses and Japanese tatami courtyard houses (washitsu), aims to provide a single-family residential model which inspires families to return to these fire blighted neighborhoods with a renewed sense of hope and excitement.

This single story, three-bedroom, two and half bath residence is located on a typical interior non-view lot 48' x 124' to meet the setback requirements for both Pacific Palisades and Altadena.

It provides a one-story accessible and flexible floor plan for a family to easily age in place, while adopting to future evolving domestic and work challenges. High ceilings of ten feet - which are lowered to nine feet in the private bedroom zones -provide feelings of airiness and expansiveness. High horizontal windows provide a modern feeling to the spaces and bath the interior with sky infused light, while providing plenty of interior wall space for art, photographs and books.

The challenge of meeting California's updated Fire Resilience Code is paramount. The challenge is how to meet the standards of Passive House and fire codes with a residence that feels open and connected to the exterior and affirms the presence of nature. Our design approach was to slice into the typical solid box of a passive house with two courtyards that enrich the indoor/outdoor experience, and to introduce a green roof that would act as a natural living deterrent to wildfires.

The modular layout is inspired by Japanese washitsu, but is directed to taking advantage of offsite prefabricated modular prefab construction techniques. The prefabricated wall and roof panels provide quality-controlled components that can be assembled on site in a period of days providing for a quick weatherproof structure. On the other hand the lime-earth stucco exterior finish is an on-site labor-based process that will provide a fire-resistant finish that reflects the materiality and colors of the local soils and landscape.