Addition to a Eugene Weston Home

California, USA

Scale:
Existing: 1,608 ft^2
New Addition: 450 ft^2

Client:
Private Owner

The existing 1608 square-feet house was designed and built by the acclaimed modernist architect & builder, Eugene Weston III in 1953. Published in the Art & Architecture magazine, the speculative “mid-century modern” home offered a contemporary alternative that was not available through conventional home builders.

The design of the 450 square-feet addition uses the site constraints and the defining elements of the existing house to create an architecture that respects the identity and history of the existing and yet, harmoniously creates its own identity that is true to its time without mimicking the old.

The design challenge was to incorporate critical aspects of the existing house that are no longer feasible under current building codes. The defining elements of the house, such as the post and beam structure, open plan, low pitched roof, and clean horizontal lines were reinterpreted under the constraints of the current zoning, seismic, energy and fire codes: The existing roof was mirrored along the eaves to create the addition and a central gutter was used to collect rainwater; the existing wood siding was reinterpreted with fire resistive metal siding; the existing façade of the house was preserved on the interior of the addition and made visible from the outside by structurally isolating the new from the old using a 34-foot Glulam beam; exposed post and beam structure of the old is reflected in the exposed rafters and Glulam beam of the new; and a high performance skin and moisture control were optimized using computer simulation.

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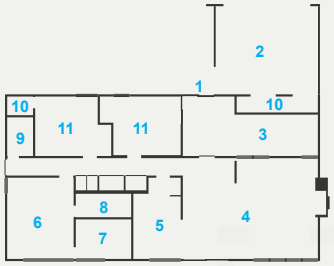
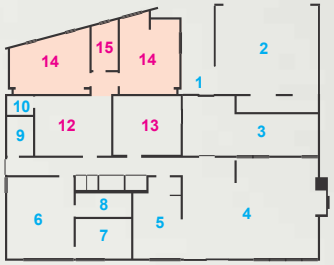
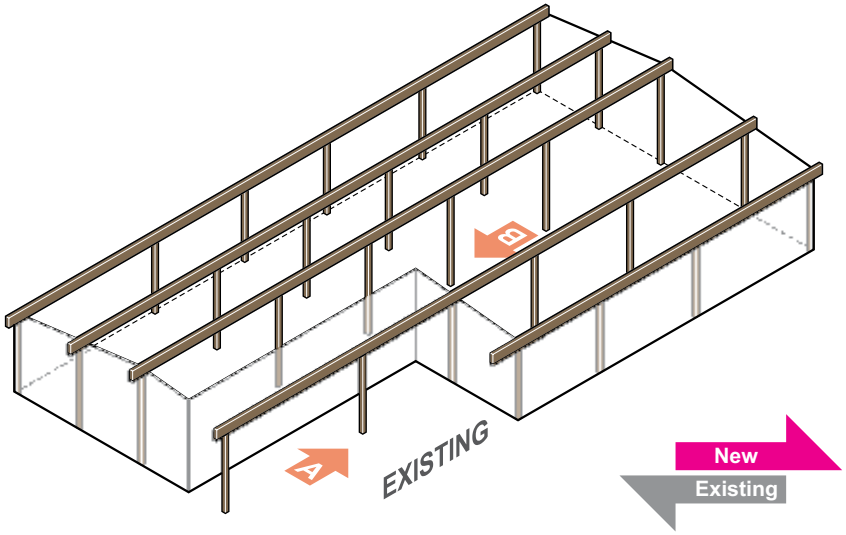
Existing

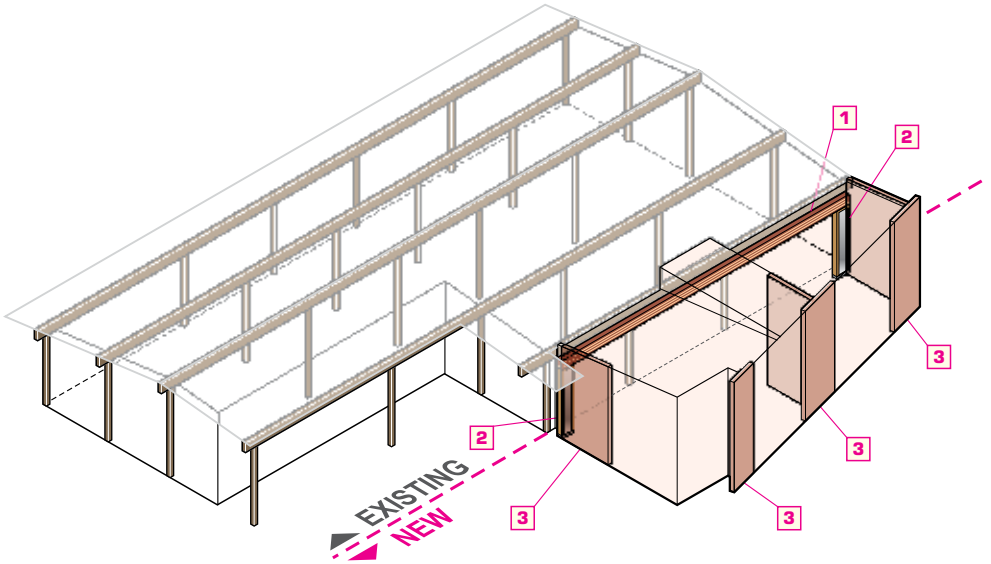


1 Entrance
2 Carport
3 Patio
4 Living Room
5 Kitchen
6 Master Bedroom
7 Master Bathroom
8 Walk-in Closet
9 Bathroom
10 Storage
11 Bedroom
12 New Family Room
13 *Renovated Bedroom*
14 *New Bedroom*
15 *New Bathroom*



With New Addition



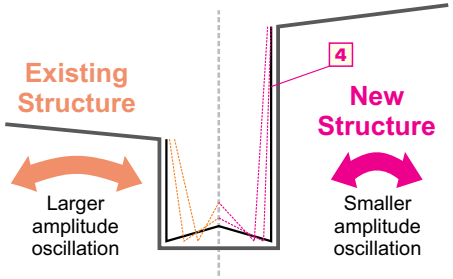


Mid-Century Modern Post and Beam Structure

Does not comply with today's criteria of
Seismic, Fire, & Energy

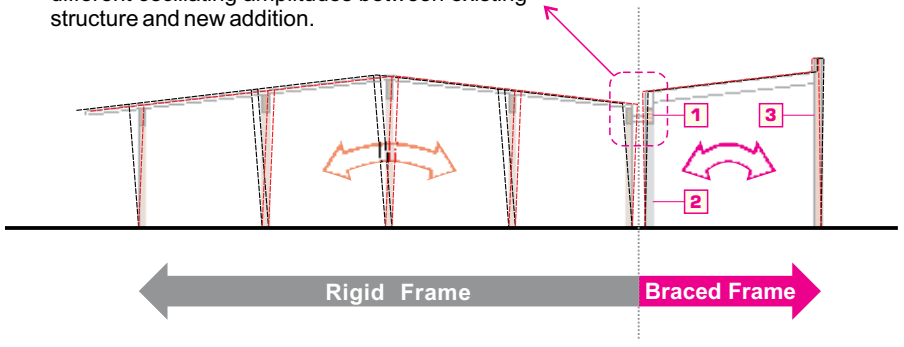
View A - Exterior

View B - Interior

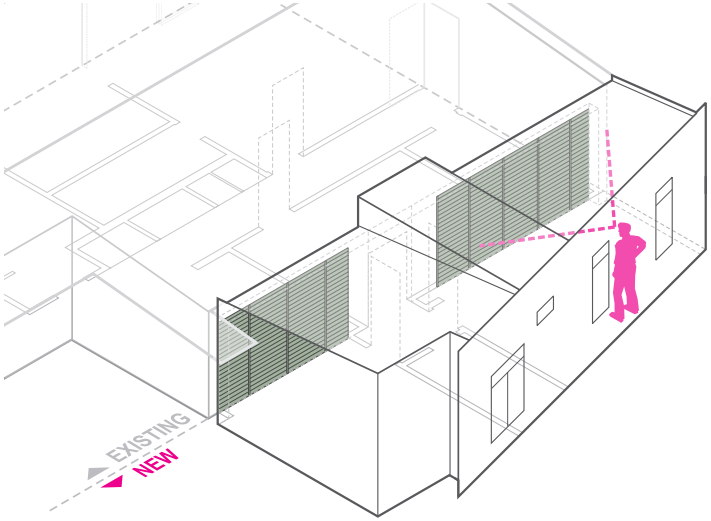


1. Glulam Beam
2. Hardy Frame
   Pre-Fabricated Portal Frame with hold-downs
3. Shear Wall
4. "W" Shape Gutter

The "W" shape gutter is able to withstand different oscillating amplitudes between existing structure and new addition.



Geometry and Structure


EXISTING
NEW

Preserved
Siding