

Chris van Uffelen

# Passive Houses

energy efficient homes



**BRAUN**



# Caterpillar House



**Carmel, CA, USA**

**Architect:** Feldman Architecture

**Completion:** 2010

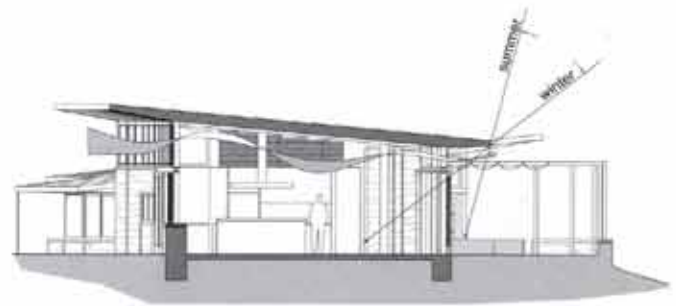
**Client:** Confidential

**Certificates and standards:** LEED Platinum Custom Home, Energy Star, California Title 24

**Sustainable techniques:** Photovoltaic system, rammed earth walls, passive heating/cooling, insulation, rainwater harvesting system

**Photos:** Joe Fletcher

The Caterpillar House is the first LEED Platinum Custom Home of the Central Coast. The client came to the project with a love of modern ranch houses and a desire for an environmentally conscious response to the beautiful site. The construction and operation of the home minimize environmental degradation within the nature preserve. The gently curving, rammed earth walls act as a thermal mass, regulating temperatures from day to night. Capturing rainwater for irrigation, three tanks proudly sit close to the home. The glazing, natural ventilation and operable shading also act as a passive heating and cooling system. Integrated photovoltaic panels enable the house to produce enough energy to meet all of its requirements.



*Left: Glazed façade and large roof.  
Right: Sustainability section diagrams.*



*Top: Terrace overlooking the landscape.*

*Bottom: Storing 103,342 liters of rainwater for irrigation, three tanks sit close to the home.*

*Right: Walls built with earth excavated from the site.*



