

CASE STUDY



Passive House Institute U.S. Certified Passive House



Application Overview

ENRG Blanket was part of the thermal design for a Passive House Institute U.S. (PHIUS) Certified passive house.

The builder, Carmel Building and Design, is dedicated to structures that are "Personal, Responsible, and Exceptional."

This is a concept Carmel Building and Design lives and breathes. It shapes their performance and inspires their work and design.

ENRG Blanket™installed into the walls and ceilings

to reduce energy consumption and improve thermal comfort

1. The Project

This charming new construction home in Carmel-by-the-Sea represents an exceptional design incorporating environmentally responsible construction. The systems, materials and building techniques improve indoor air quality, sound, comfort and durability in this elegant home.

2. The Challenge

The home was a new construction project which was Central California's first PHIUS+ Certified Passive House. The structure is also to be LEED Platinum certified. The challenge was to provide materials that would meet or exceed the strict demands of the Passive House and LEED certification standards and provide added comfort and energy savings.



3. The Solution

Carmel Building and Design called on Phase Change Energy Solutions to determine the optimal amount of ENRG Blanket for the structure to provide energy saving performance while maintaining reasonable construction costs.

4. The Results

The energy consumption of this home is well below what is expected for similar homes without phase change material installed. The weather patterns in this region are excellent for charging and discharging the phase change material and saving energy in the process.

Carmel Building and Design was proud to have this home named "Best New Home" in Fine Homebuilding magazines 2013 HOUSES Awards issue.



