LEED v4 Single Family Case Study

Karla Butterfield, Senior Sustainability Specialist, Steven Winter Associates, Inc.

ABSTRACT

The Taft School faculty home in Watertown, CT serves as a high performance residence and learning lab for students. The project earned certification through Energy Star, Indoor airPLUS, Water Sense, PHIUS, the DOE Zero Energy Ready Homes, LEED v4. Living Building Challenge petal recognition is pending. Excluding photovoltaic installation the HERS index was 33, and with the 13.1 kW system the final HERS Index is -14. This presentation will highlight the design and construction techniques used to achieve net zero energy and how the certification programs come into play. It will focus specifically on LEED v4 mandates and credits, highlighting the challenges and rigor of the program.

BIOGRAPHY

Karla is a Senior Sustainability Specialist at SWA, working with residential buildings. Her expertise is in sustainable consulting services, program certification support and implementation of high performance and sustainable building technologies. With architects, developers, builders, and homeowners, she develops specific sustainability strategies for both new construction and renovations. Ms. Butterfield is an integral part of the initial strategic planning sessions and workshops with stakeholders based on program criteria; she verifies in the LEED for Homes, Passive House, Energy Star, and National Green Building Standard programs.