Title:
Performance of the UAB net-zero energy solar house

Author:
Hessam Taherian
University of Alabama at Birmingham (UAB) – Department of Mechanical Engineering

Statements:
- UAB entered Solar Decathlon 2017 competition with their 1000-ft² net-zero energy house.
- Average R-value of the envelope is 31.
- Computer models showed that the house needs 1.8 ton of heating in heating season.
- Blower door test showed the infiltration rate at -50 Pa was .17 CFM₅₀/ft² of the envelope, i.e. 3.5 ACH.
- The house generated a net amount of 76.868 kWh during the competition by the 9.9 kWₚ installed PV panels.