

LEAP SUCCESS STORY



**Robert Hueckstedt &
Nazen Merjian**
1936 Double story home
1353 sf, 2 BR, 1 1/2 BA
Gas furnace, window AC
Location: Charlottesville, VA

Projected Energy Savings:

40%



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Robert and Nazen received a free energy review in the fall 2009 and with that wanted to know more about getting a comprehensive energy assessment and about the Home Performance with ENERGY STAR. How they could be more energy efficient and then add solar PV panels.? The couple also thought their house could handle temperature swings better since it had stone walls and that this might be an advantage over other homes that did not have the stone (or thermal mass) for their walls.

Basic Issues Uncovered in the Home Performance Assessment:

- The house was 7 times leakier than what it should be. It was measured at 7944 cfm50 while the standard for its size is 1152 CFM50.
- The crawlspace under the office was not properly insulated or air sealed. It also did not have a ground moisture barrier.
- The basement walls and band joist lacked any insulation and air sealing.

Energy Improvement Measures Implemented:

- Air leakage reduced to 4200 CFM50 and basement rim joists were air sealed and insulated, crawlspace moisture barrier installed
- Exposed ductwork was resealed and secured
- Small attic was sealed and insulated to R38+

Expected Benefits:

- Reduction in space heating and cooling bills by 40%
- More comfort and safety to family
- Feeling more environmentally responsible in their living



"Before participating in the LEAP Home Performance with Energy Star Program I thought my home's major insulation problem was windows and doors. After my LEAP home energy audit I realized no, it was the problem air leaks and lack of insulations in the crawl space, the attic and the basement.

LEAP then became an invaluable partner in getting my home air sealed and insulated, both lessening my harmful effects on the environment, protecting my family, and saving me money."