



Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, & Virginia

“Highlighting the ‘Service’ in AESP”

Energy efficiency can make a real difference in people’s lives especially families with fixed or limited incomes. That is why, this year, the Association for Energy Services Professional Southeast (AESP-SE) Chapter is sponsoring a home energy makeover for one deserving military veteran in its service territory.

The AESP-SE Chapter worked with the Special Forces Brotherhood Motorcycle Club and Green Beret Foundation to identify candidate families in central Tennessee. These families shared their stories and why they’d benefit from the home energy makeover. The candidates were presented to the AESP-SE Chapter membership for consideration and one family’s home was chosen and is in the retrofit process.

Following a utility-grade home energy audit, contractors have identified a series of improvements that stand to save this family of four 30% on their energy bill. Through the contributions of a variety of sponsors and the labor of volunteers, this family’s home will receive the following energy efficiency upgrades:

- Air Sealing
- Insulation
- Envelope
- HVAC
- Water Heating
- Ducts
- Appliances and Lighting
- And more (see next page for detailed scope)!

Please see the next page for more specific donation needs. For more information, sponsorship or media opportunities, please contact Cyrus Bhedwar, Vice-President, at cbhedwar@seealliance.org or Frank Wickstead, Treasurer, AESP-SE Chapter at fwickstead@gmail.com.

AESP Southeast Chapter

Our chapter’s mission is to offer energy services professionals opportunities to network, share ideas and promote the industry across the Southeast.

President

Cyrus Bhedwar, Southeast Energy Efficiency Alliance (SEEA) cbhedwar@seealliance.org

Vice President

Sheryl Shelton, South Carolina Electric & Gas (SCE&G) SSHELTON@scana.com

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Carolyn Greer, Tennessee Valley Authority (TVA), cgreeg@tva.gov

Past Presidents

L.K. Browning, TVA (2016) • Neil Pickard, Georgia Power (2014-2015) • James Linder, TVA (2010 - 2013)

Veteran's Energy Efficient Home Project

Scope of Work and Material Needs

1. Air Sealing:
 - a. Air Seal all electrical outlets
 - b. Weather strip windows and doors (front and garage)
 - c. Seal all penetrations in the mechanical closet below the stairs
 - d. Air seal top plates and attic penetrations in the attic area above the laundry room
 - e. Air seal all plumbing and washer/dryer penetrations in laundry room
2. Insulation:
 - a. Remove existing blown-in fiberglass insulation (575 sf)
 - b. Spray foam rafters in 2nd floor attic
 - c. Remove knee wall batt insulation and spray foam the knee wall area between the garage attic and 2nd floor (90 sf)
 - d. Drill and fill exterior wall between garage and living room/laundry room/mechanical room.
 - e. Install 13 inches of loose fill cellulose above laundry room (72 sf)
 - i. Install insulation dam between laundry room attic insulation and garage space.
3. Doors:
 - a. Replace French doors and casing on the right side of the home
4. HVAC Systems:
 - a. Perform Manual J Load Calculation to determine appropriate HVAC size for the home
 - b. Replace existing heat pump with a properly designed, variable speed, high efficiency heat pump. (9 HSPF; 16 SEER is modeled in Beacon but a higher SEER system is an option as well)
 - c. Install smart wi-fi enabled programmable t-stat (ecobee or similar with remote sensors)
 - d. Recommend zoned system (1st and 2nd floor zones)
 - e. 6 inch media filter (large dogs in the house)
 - i. 1 years' worth of filters
 - f. 2-year service contract with the new system (2x/year – before heating season and before cooling season)
5. Ducts:
 - a. All ducts are located within the building envelope, duct seal all accessible areas of duct work. Duct replacement would require first floor ceiling demo. Considering ductwork location between floors and in hard to access areas, this home would be a great candidate for an AeroSeal treatment.
6. Domestic Hot Water:
 - a. Replace electric water heater with high efficiency Rheem tank with insulated pipes. (not modeled in Beacon). Are you talking about a tankless unit or a heat pump water heater?
7. Baseload Improvements (Lighting & Appliance):
 - a. Replace all interior and exterior lighting with LEDs (29 bulbs)
 - b. Replace refrigerator, washer and dryer with Energy Star appliances (not modeled in Beacon)
8. Building Performance Measures:
 - a. Install whole house ventilation system
 - i. ERV (Panasonic or similar) or other Balanced system

- b. Vent existing bath fans to exterior of the home (2 present).
 - i. One will likely have to go through either rim/band joist and/or brick/block wall. It's close to being on-grade.

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