

Procedures: Residential Walk-through Assessment and Retrofit

Note: All volunteer resources, including documents needed for this project, are available online at <http://energy.ces.ncsu.edu/energy-volunteers/> Volunteers must enter the ID “energyconservation” with the password “volunteer” to access these resources.

Before the assessment:

- Homeowners who are interested in receiving an assessment or an assessment & retrofit need to complete a **Homeowner Request and Pre-Assessment Questionnaire**.
- Once the form is complete and is received by the volunteer manager, the lead volunteer for that home will contact the resident to schedule the assessment.
- Lead Volunteer and homeowner meeting (via phone or face-to-face):
 - o Review and confirm the completion of the Homeowner Request and Pre-Assessment Questionnaire form (homeowner may need help completing the form).
 - o Make sure the homeowner is aware they need to be home and participate in the assessment/retrofit.
 - o Invite all residents (as appropriate) to participate in the assessment/retrofit
 - o Set up a time for the assessment/retrofit.
 - o Ask homeowner to ensure debris, clutter, etc. be at a minimum so a proper visual assessment can be conducted (attic stairs are clear, HVAC accessible, basement accessible, etc.)
 - o Ask participant how they heard about the program, what their major concerns are, and what energy conservation measures they have taken in the past. (Record responses)
 - o Ask homeowner if they have any specific concerns about the house in terms of energy efficiency, comfort, etc. (record responses) - Example questions:
 - Do you feel drafts in any particular area of your home?
 - Is one room or section of your home more difficult to cool/heat?
 - Do your appliances seem to be functioning well?
 - Do your utility bills seem higher than you think is “normal?”
- Put together **Educational Resource Materials Packet** for homeowner. You will have several resources to choose from. There will be a basic set of materials every homeowner will receive and this can be augmented based on unique needs identified during your intake process (ie: Spanish speaking, roofing options, window selection, appropriate utility company resources).

When you arrive at the home for the assessment:

- Introduce yourself – Smile and make residents feel comfortable. You are a stranger in their home so put them at ease. Remember, they may feel self-consciousness about their home (cleanliness, humbleness, etc) so be gracious and warm. Find one aspect of the home and compliment them on it. (nice neighborhood, pretty flowers, etc)
- Show the homeowner the **Assessment Checklist** you will use.
- Have the homeowner sign the **Release Waiver** for the assessment (and retrofit, if one is being done).
- Ask if others who live in the home would like to participate by “shadowing” you for parts of the assessment (not attic or basement).

Conduct Assessment:

- Use **Assessment Guidelines** and **Assessment Checklist** when conducting the home assessment.

Post Assessment:

- Review findings from assessment with the homeowner.
- Present findings as “no cost,” “low cost,” and “longer-term payback” strategies
- Discuss priorities, and explain initial costs vs total cost, potential savings, DIY projects vs those projects requiring a trained professional, etc.
- Identify projects that can be done by volunteers, taking \$, time, safety, and difficulty level into account. The homeowner needs to be a part of the process in determining which possible retrofit actions are selected from the list of possibilities. (For example, if the home needs CFL bulbs, weather stripping, low-flow showerhead, attic hatch sealing, and air leaks sealed under the sink, the volunteers will not have the time or budget to do all of these actions. The homeowner needs to be a part of deciding what final retrofit actions are selected.
- Go through **Educational Resource Materials Packet** with the homeowner, explaining the no cost and low cost strategies for lowering utility bills. (This should only take 5 – 10 minutes)

Retrofit:

- Invite and encourage the residents to participate (as appropriate) in the retrofit. For example, if you are sealing register boots, demonstrate how it is done and the materials being used. Then invite the homeowner to seal the other ducts, coaching them as needed.
- Only conduct retrofit projects that are approved by the program, are safe, fit within time and monetary restrictions, and are identified as needed by the home assessment and by the homeowner.
- Follow **Guidelines and Procedures for Retrofit**