



To Mobile Home Dwellers:

Focus on Energy is inviting you to participate in a *free* pilot project that seeks to address the energy concerns of your manufactured home.

Building Scientists and researchers have determined that duct leakage, *in most cases*, is the number one source of energy loss in mobile homes and a major source of comfort complaints.

Trained installers are prepared to scientifically test and seal the unwanted holes in your duct system, plus evaluate other energy-saving opportunities in your house.

Since this is a research project there will be no charge to you- Why should you pay for something you didn't ask for?! We will, however ask you to sign a release form that requires the following:

1. Record and monitor your energy usage before and after the work is performed.
2. Complete a survey mailed to you 6 months after work completion.
3. Allow us to use your experience (anonymously) in promoting and explaining this project to our administrating agency.

Have you ever noticed any of the following symptoms?

1. The room furthest from the furnace (usually a bedroom) is cooler in winter, is difficult to heat. In summer, the conditions are the opposite- it is difficult to cool this room.
2. Air flow out of the register in that room is minimal.
3. Very long furnace and/or air-conditioner run times.
4. Air flow can be felt coming from registers when furnace fan is not operating.
5. Large amount of snow melt along the skirting edges.
6. Unusually large energy bills, entire house is difficult to heat.
7. In double-wide units, one half is harder to heat.

Why are we offering this for free?

Currently, there are few if any contractors offering this service- it requires scientific equipment, training, the physical ability to perform the duct sealing, and customers who are willing to pay for the service. It is our opinion that after retrofitting over a hundred mobile home duct systems across the state and measuring changes in fuel consumption, we can demonstrate sufficient energy savings and increases in comfort such that other mobile home owners will recognize the value of duct-sealing and be willing to pay full market prices for this service.

The Mobile Home Park owner/manager has been fully informed about this project and consents to our offer.

We understand residents are very wary of conmen and rip-off artists; you will be given a "Participation Agreement" to sign which outlines the following:

- Name of contractor performing the retrofit, stating that they are insured
- Permission to track your fuel usage records (required)
- Procedures we will be performing
- Your permission to perform work
- Warnings and possible side-effects

What can you expect?

The contractor will talk with you for about 15 minutes to explain the procedures, gather some background information, obtain your utility account numbers, and ask you how your house performs in winter and summer.

Next, a "blower-door" is set-up in the exterior doorway. This machine has a large fan which gently depressurizes the house, exaggerating air-leaks. The amount and source of leakage in the whole house can be measured, and at this time the technician will determine if the ducts are leaky enough to warrant sealing work.

If duct sealing is needed in your unit, the contractor begins by removing the floor registers and inspecting the duct runs with a flashlight and mirror, looking for holes and obstructions. Next, special tape and duct mastic is applied to the boots that connect your registers and ductwork. The end registers will be "scooped" to facilitate good air flow.

If accessible and necessary, the A-coil access panel at the low end of the furnace will be opened, and work performed there. In many cases, the air-conditioning evaporator is located in this compartment, and it may be necessary to access the leakage from underneath the home. In these cases, the bottom board material is carefully opened, the leaks sealed, and a durable patch is placed over the opening.

The contractor will, in the course of testing and working, show you additional places energy retrofit work can be performed, and ways you can operate your house more efficiently.

Focus on Energy offers many ways to save you energy; from compact fluorescent bulbs to Energy Star appliances. He will give you literature and information to help you make smart energy choices.

TO: MOBILE HOME COURT MANAGER OR OWNER
FROM: BOB PFEIFFER Project Manager, Home Performance with ENERGY STAR®
RE: MOBILE HOME DUCT SEALING PILOT PROJECT

Greetings,

I work with Focus on Energy FOE- the state-wide initiative designed to help Wisconsin residents and businesses meet their energy needs by promoting the newest and best technologies and practices as a means to stimulate market acceptance. Home performance with ENERGY STAR® is the program that works on existing homes- we incorporate diagnostic testing and Building Science principles into home weatherization to maximize savings potential while increasing safety, comfort, and durability of the house.

As you know, manufactured housing is unique, having its own advantages as well as challenges. I *personally* have weatherized hundreds of mobile homes through the Low-Income Weatherization Program and trained dozens of workers in the past twenty years.

Over the course of this time we have learned a few things about what works and what doesn't. Duct-sealing and related distribution modifications head the list of cost-effective retrofit measures. Unfortunately, I know of no contractor in the state that performs this service, nor many mobile-home dwellers that are aware of the potential benefits associated with this retrofit.

It is the unique nature of FOE that allows us to "seed" the marketplace through the development and implementation of pilot projects that demonstrate potential to be successful as "stand-alone" services.

Our intention is to offer free duct-sealing, minor distribution modifications of the heating system and clothes dryer, perform safety testing, and offer energy saving tips free of charge to 150 manufactured housing residents in various locations in Wisconsin. We will collect pre and post fuel consumption records, and analyze the results to determine the effectiveness of the work performed.