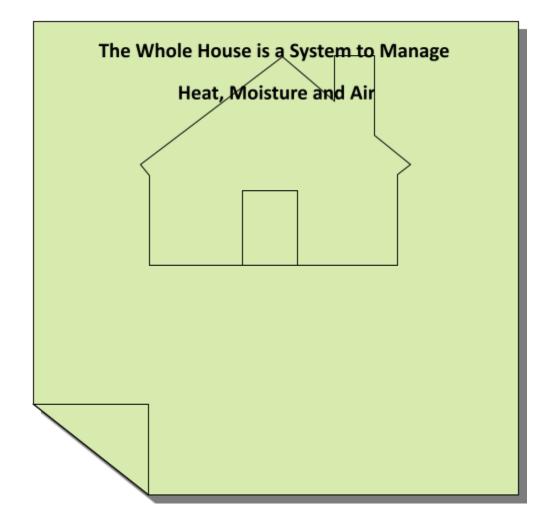
# ASSET MANAGEMENT OF THE HOME

For most Americans, home equity represents the biggest component of overall net worth.

How can we take an 'asset management' approach toward home maintenance?



Asset Management is the Big Picture System of Household Maintenance

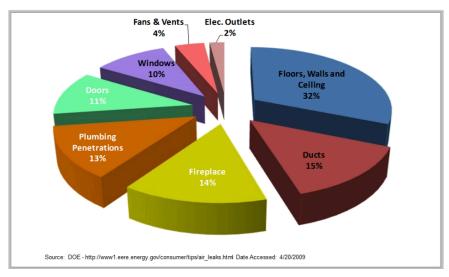
### The Whole House is a System

- Building science has advanced over past 30 years from a focus on individual parts to the whole
- All components roof, attic, walls, basements, crawl spaces -- interact with each other and affect the quality of the air throughout a house
- Basic laws of physics endure: heat goes toward cold; heated air rises
- Distribution systems ductwork are critical toward getting air to and from rooms
- Bad air in the basement directly affects air in bedrooms impact on asthma and allergies
- Moisture in all forms is the most significant threat against durability of the house
- Healthy House Principles Guide Us: Keep it Dry, Ventilated, Safe, Clean, Pest-Free, Contaminant -Free

### Certain Steps Improve Health, Safety, and Comfort While Reducing Energy Use

- Of the 75 million single family homes in the U.S., over 90% leak energy
- Most leaks are from numerous nooks and crannies throughout the house not simply windows
- HVAC systems have been typically oversized and installed via a rough rule of thumb
- Air sealing, insulation, duct sealing are one-time solutions that yield most economic benefits
- As new houses are built tighter, better ventilation balances indoor air and humidity

# Common Air Leak Sources



## An Energy Audit, or Assessment, Evaluates Your Specific House

Provides whole house visual inspection and calculates volume of structure





- Records current status of mechanical equipment
- Uses advanced diagnostic tools to measure systems with objective data
- Uses a particular test the blower door to identify overall leakiness of house
- Uses a visual thermal camera to show all (often unexpected) leaky areas
- Tests safety of equipment for carbon monoxide
- Runs data through building science software calculations to identify custom recommendations

### The Savings/Investment Ratio Helps Prioritize Projects

- Simple payback is useful but doesn't capture all residual benefits
- Savings/investment ratio helps you look at all savings over a longer period of time
- Helps to balance projects with visual appeal (e.g. new countertops) with projects to improve core house systems (e.g. air sealing and insulation)

#### **Bottom Line:**

- For any project, installation quality is the most critical factor
- We need to take the time to research quality contractors, ask for references, compare awareness/willingness to do a job correctly
- "We are paying for any system: whether up front, or when it breaks down (...inconveniently)"