



Air Sealing Training:

What you will learn:

- Reasons for Air-sealing
- Best-Practice Air-sealing techniques
 - Air-sealing a large chase
 - Air-sealing a plumbing penetration
 - Weatherstripping an attic access panel

Why air seal?

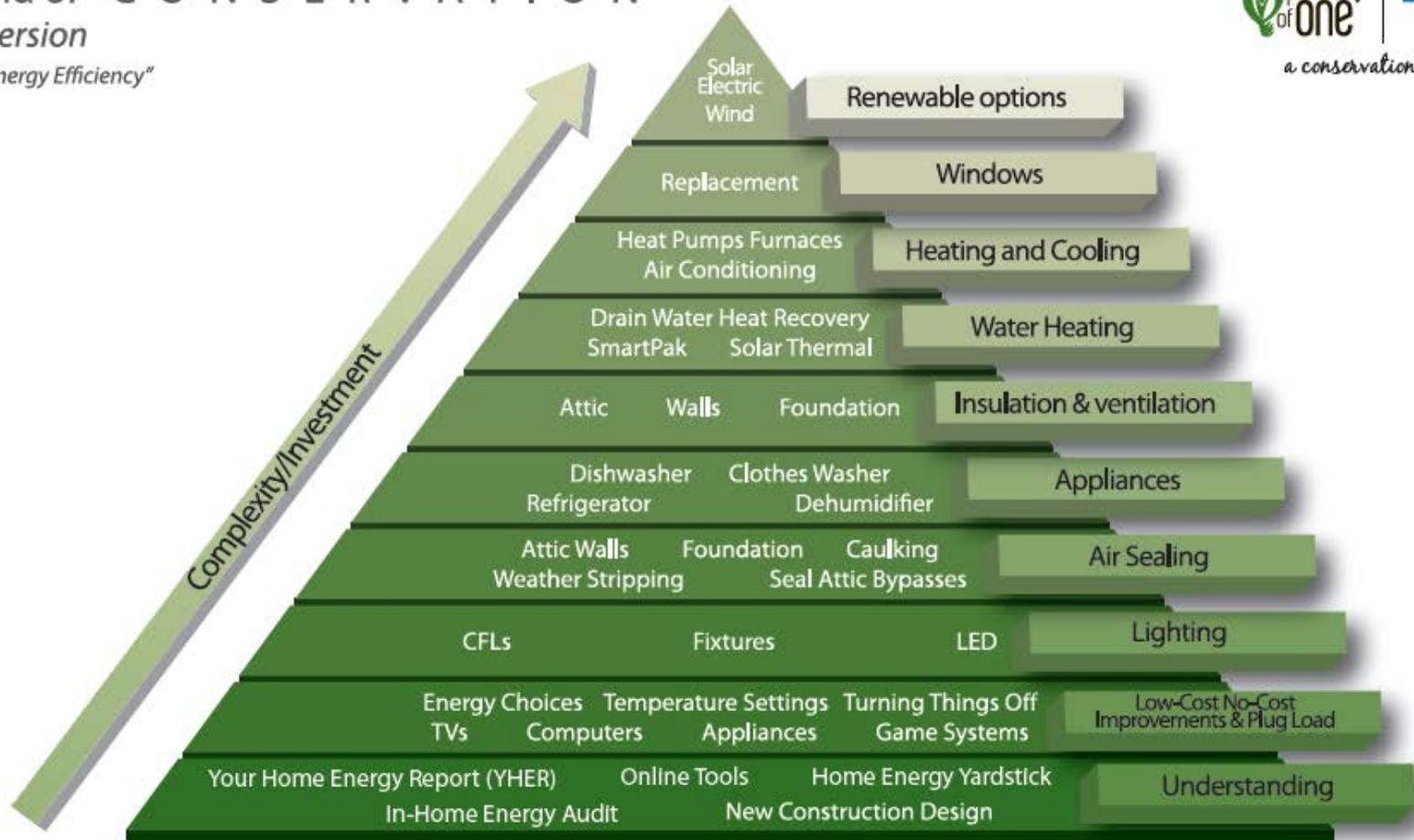
- Increase comfort
- Save money
- Improve air quality
- Benefit the environment



Conservation Pyramid

The Pyramid of CONSERVATION
residential version

"A Foundation in Energy Efficiency"

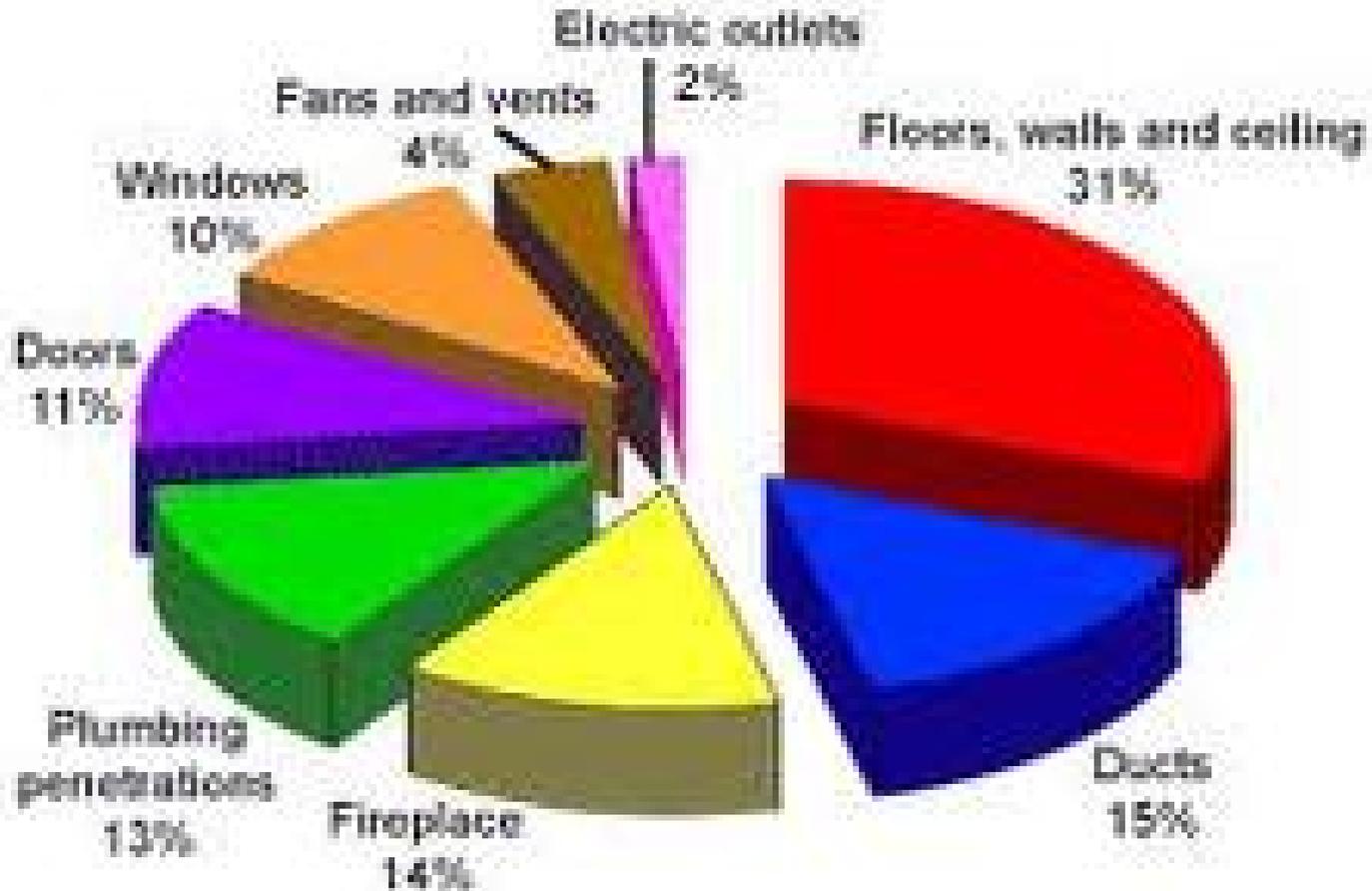


Conservation – where do I begin?

www.mnpower.com/powerofonehome

Where are the air leaks?

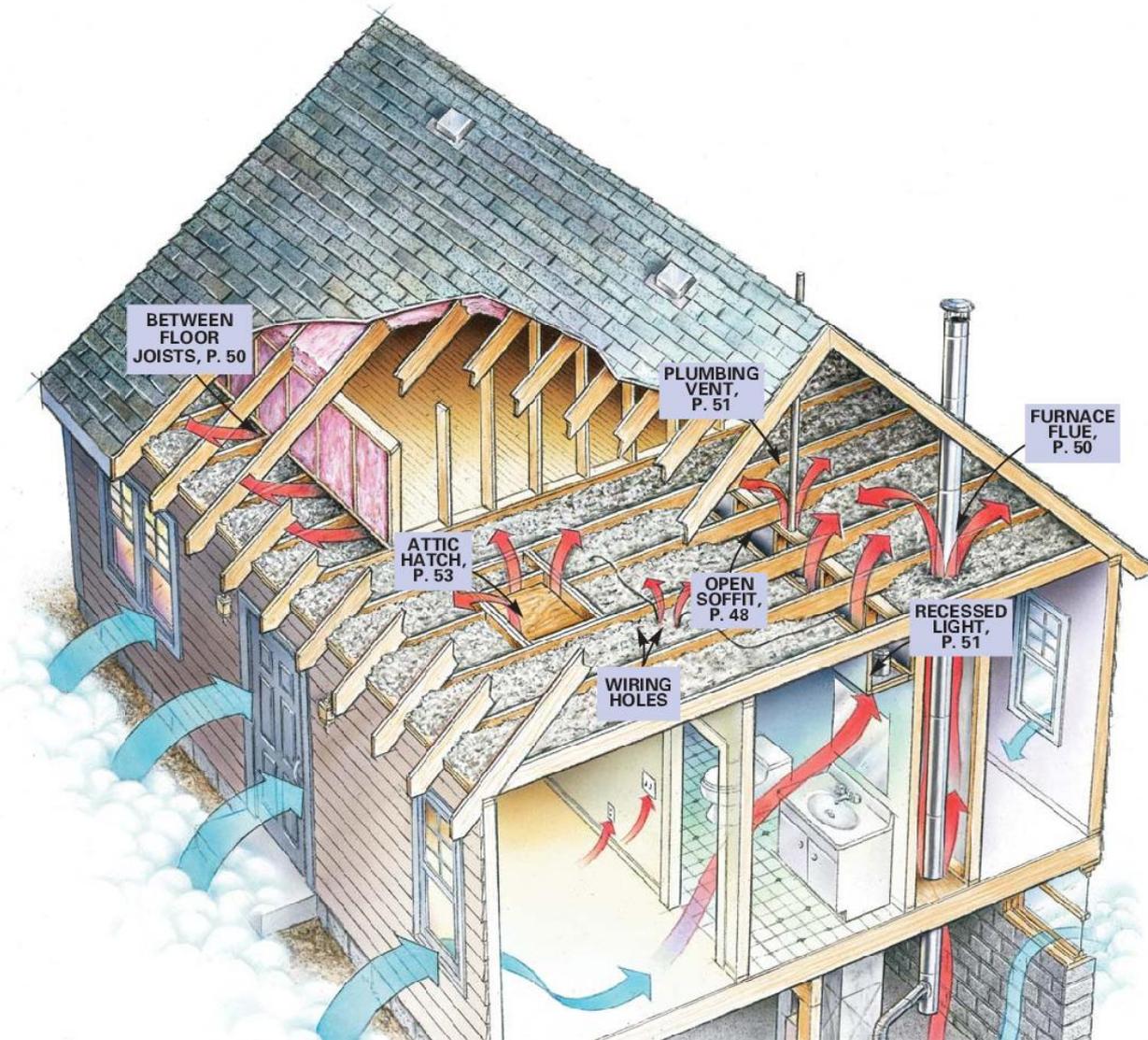
Primary Air Infiltration Locations



Common Air Leaks:



Common Air Leaks:

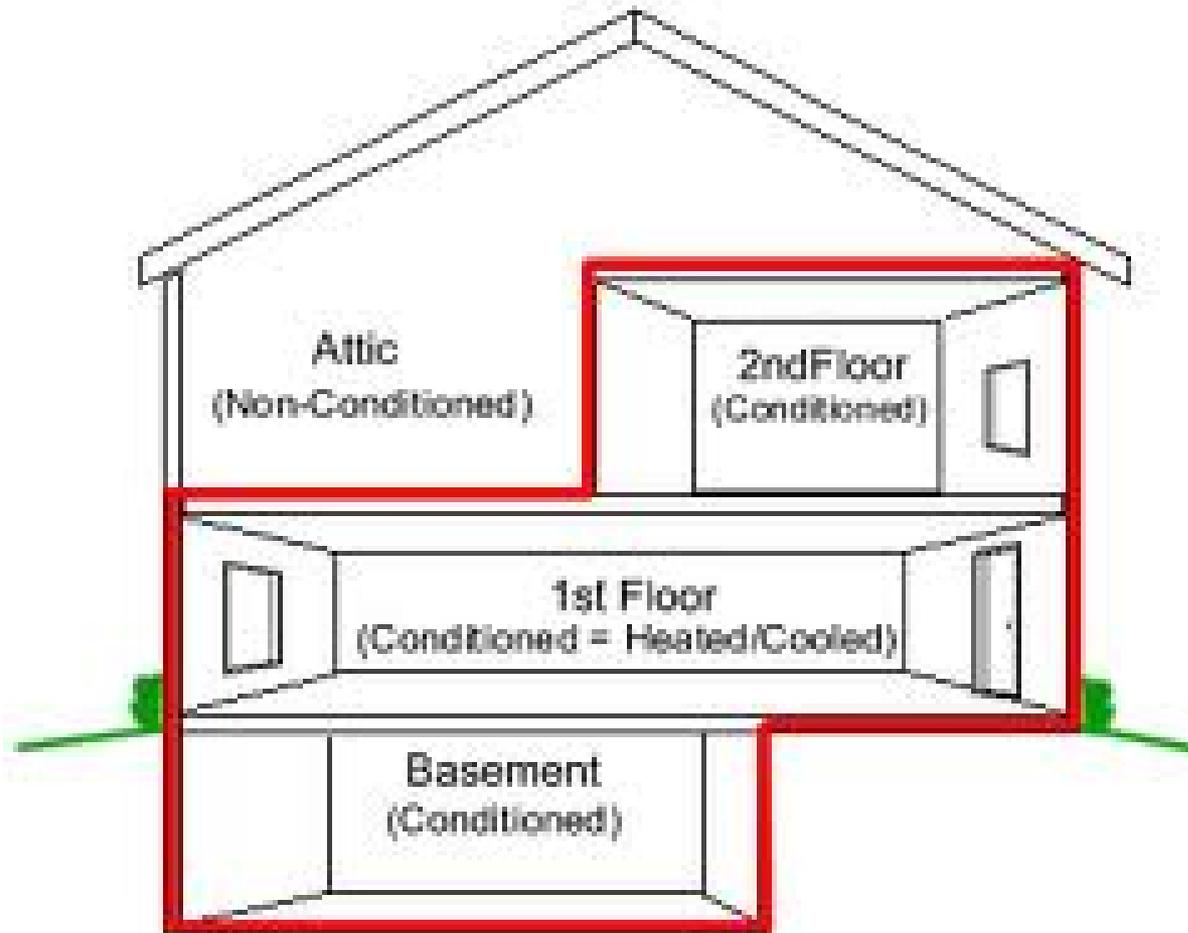


Common Air Leaks:

Major Sources of Air Leaks



The Building Envelope:



The Red Line Shows The Envelope

The Building Envelope:



The Building Envelope:



Insulation is NOT an air barrier!



How do we find air leaks?

Blower Door Testing



Smoke Pencil

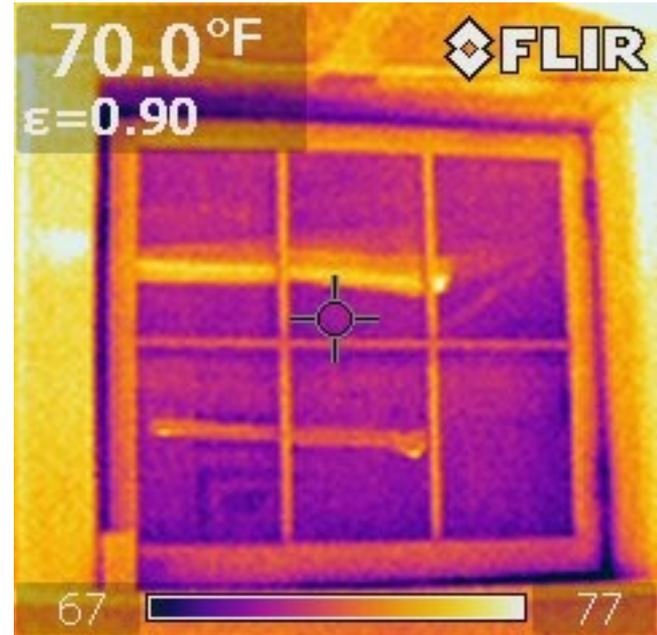


How do we find air leaks?

Visual Inspection



Thermal Imaging



On with the Weatherization!



Safety First!!



Safety Rules For This Class:

- Always wear Personal Protective Equipment (PPE)
- Be careful with foam and other materials
- Keep your workspace as neat as possible
- Please help clean up

The Skills You Will Learn In This Training:

Seal a large opening with no heat source:

Attic Chase



Attic Chase Prop



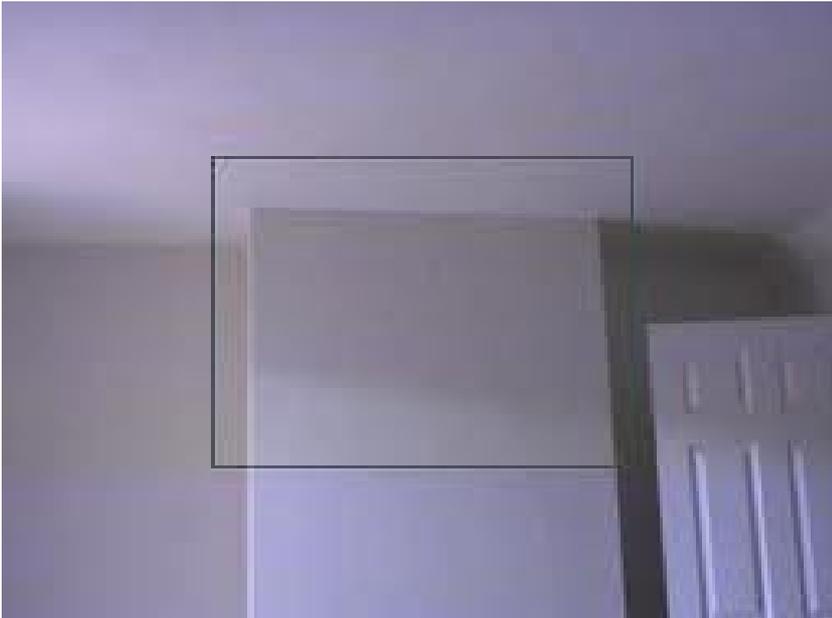
Attic Chases:



Seal a large opening with no heat source:

Attic Chase from inside

Chase viewed from attic



Attic Chases:

Attic chase with no heat source:

Attic chase with a heat source:



Seal a large opening with no heat source:

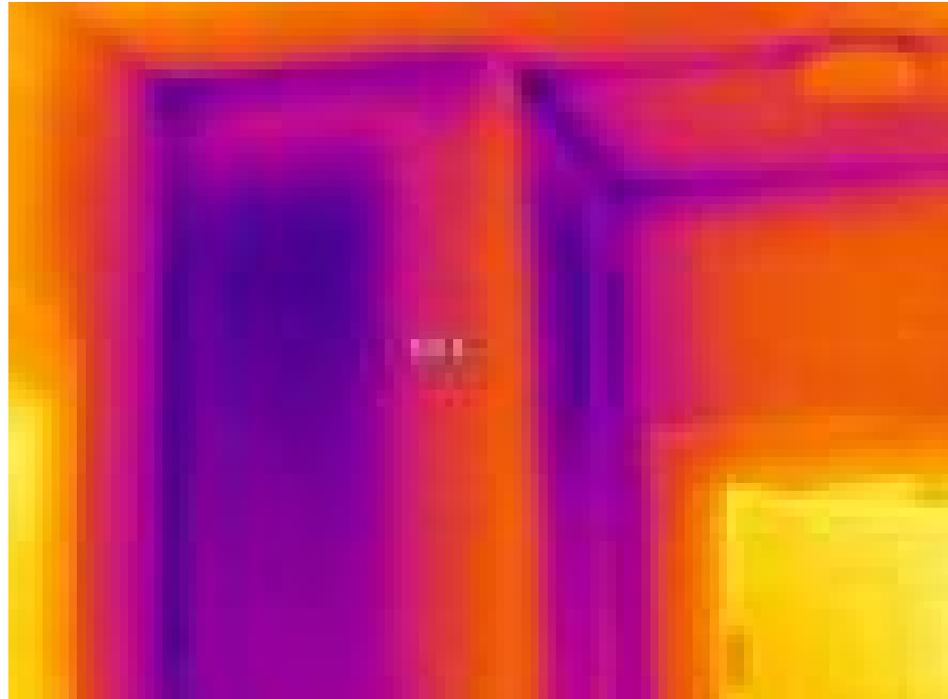
Chase viewed from attic

Chase viewed from attic



Seal a large opening with no heat source:

IR photo of chase



Seal a large opening with no heat source:

Materials



Materials



Seal a large opening with no heat source:

Proper installation



Improper material



2. Air seal a plumbing penetration with a backer:

Huge Plumbing Penetration



Plumbing Penetration Prop



Air seal a plumbing penetration with a backer:

View from inside



View from crawlspace



Plumbing Penetrations:

Plumbing penetration in the attic:



Plumbing penetration in the crawlspace:



Air seal a plumbing penetration with a backer:

IR photos showing air leaks



Air seal a plumbing penetration with a backer:

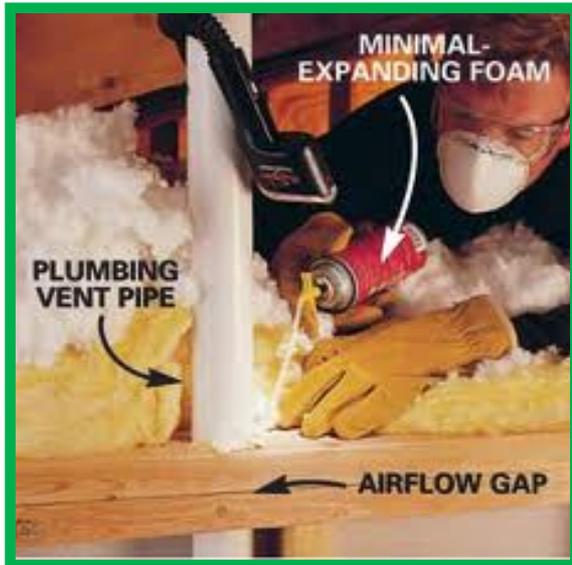
Materials



- One-part foam
- Fiberglass backer

Air seal a plumbing penetration with a backer:

Proper installation



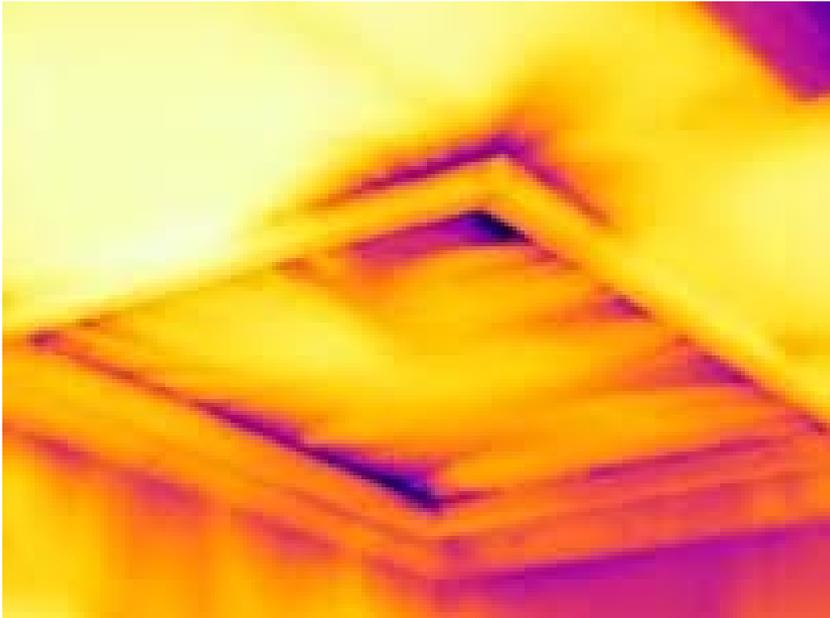
Air seal a plumbing penetration with a backer:

Improper installation



3. Weatherstrip an attic access panel:

Leaky Attic Access Panel



Attic Access Panel Prop



Weatherstrip an attic access panel:

Attic access from inside



Attic access from inside



Attic Access Panels:

View from attic:



View from attic:



Attic Access Panels:

Tiny opening:

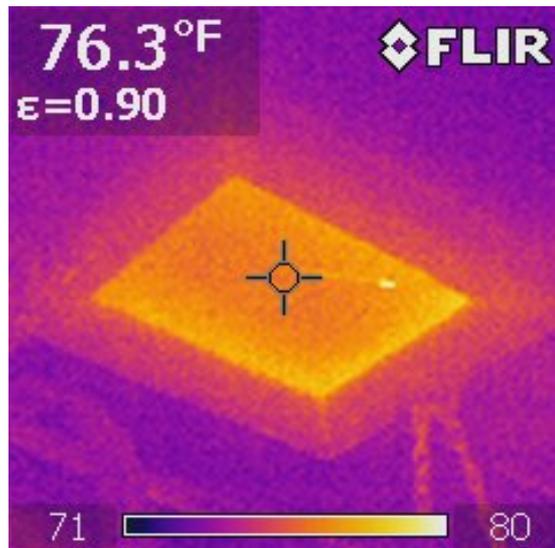


**Pull-down access with
removable foamboard box**

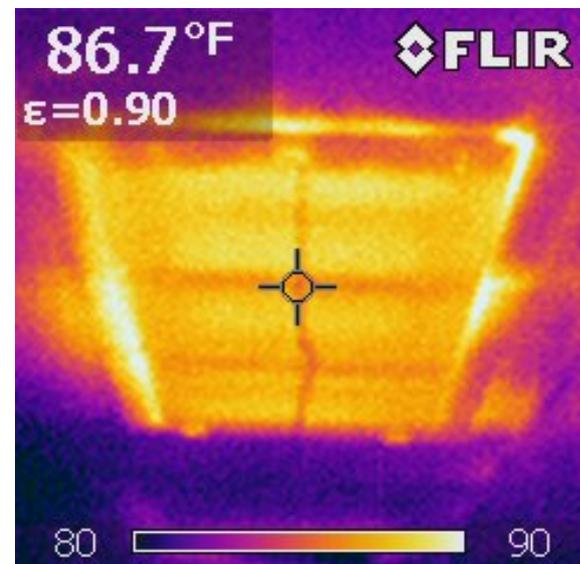


Weatherstrip an attic access panel:

IR photo showing leaks



IR photo showing leaks



Weatherstrip an attic access panel:

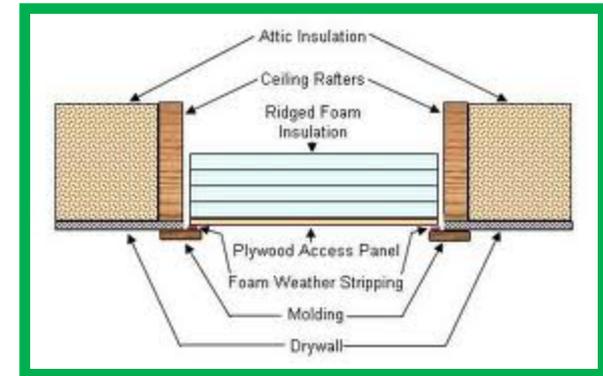
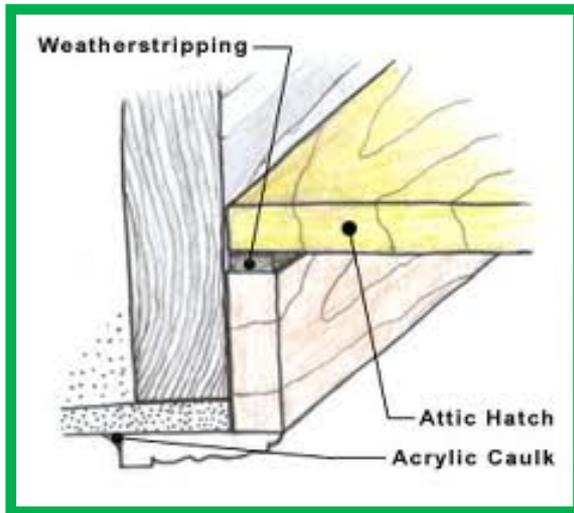
Materials

- Foamboard insulation
- Weatherstripping



Weatherstrip an attic access panel:

Proper installation



Weatherstrip an attic access panel:

panel:

Improper installation



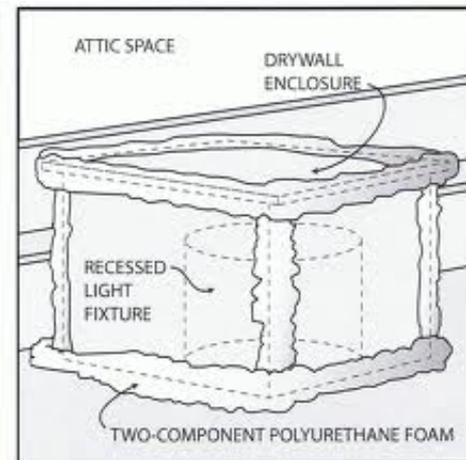
Other Weatherization Skills:

Sealing recessed lights:

Non IC Rated Recessed Lights



Recessed Light Prop



Sealing around chimney vents:

vents:

Chimney Chase



Chimney Chase Prop



Window caulking



Water Heater Insulation



Blown-in Insulation Installation



We can help!



Call: (828) 398-4168