HOME ENERGY RETROFIT

GREEN ECONOMIES YOUTH FELLOWS PRESENTS

HOW-TO GUIDES

DOORS & ATTIC DOORS

WEATHERSTRIPPING

S.W.E.E.T. alabama

WWW.SWEETAL.ORG

TABLE

CONTENTS

IMPORTANCE
OF WEATHERSTRIPPING

Attic doors are an important part of home energy retrofitting. Attics typically are not a finished part of the house and, therefore, often aren't insulated.

This means that the attic is essentially the same temperature as the outside of your home.

Without a proper seal between your home and your attic, heated and cooled air from your home will be sucked into the attic, making your HVAC system work harder (aka use more money) to keep your home at your desired temperature.

For that reason, it's important to seal off the attic area from the rest of the heated and cooled home.

This document will outline how to make your attic door more energy efficient through the installation of weatherstripping and an attic lock.

PRECAUTIONS

- **Peel away any old weatherstripping.**
- **Scrub off any sticky residue with adhesive remover.**
- **Wear proper shoes on the ladder.**

MATERIALS

- Weatherstripping
- Lock / Latch
- Adhesive Remover
- Adhesive
- Soap
- Water
- Rag

TOOLS

- Scissors
- Ladder
- Screwdriver
- Tape Measurer
- Hammer
- Nail

WEATHERSTRIPPING DOORS

1. Clean the door and door jamb.
    a. First, clean the door and the jamb, removing as much dirt and debris as possible. If any grime remains after scrubbing with soapy water, consider using fine-grit sandpaper to eliminate residual buildup.
2. Take measurements along both sides of the door as well as the top and bottom of the door.

3. Tighten the door hinges.
    a. Close the door.
    b. Take out one of the pins in the hinge. Use a nail under the pin and hit it with a hammer.

HINT: It doesn't matter which one you take out and when it gets towards the top, you will be able to pull it out.

C. Put a zip tie or twist tie into the hinge and make sure it goes all the way to the bottom.

HINT: Bend the top a little bit so it doesn't fall all the way through.

d. Replace the pin. Use a hammer to tap the pin back into place.

HINT: You may need to hold the zip tie to make sure it doesn't move too much.

e. Adjust the hinge if it's not on straight by opening and then closing the door.

HINT: This should put some resistance on the pin.

f. Test the door to make sure it stays open.

HINT: Once tested and it works, cut off the edges of the tie so you don't see it.

4. Measure the gap between the door and the jamb.
    a. You need to answer two questions. First, how wide is the gap between the door and the jamb? (Be sure to measure twice, once along the side, and again along the top. These measurements might differ.) Second, how wide is the jamb? While the answer to the first question tells you how thick the weatherstripping you purchase can be, the second answer reveals how wide. Plan to buy enough weatherstripping to run across the width and height of the door, plus about 10 percent extra (just in case).

5. Select the weatherstripping width based on your door measurements.

6. Cut your weatherstripping into segments to size.
    a. With your chosen weatherstripping at the ready, proceed to cut three pieces—one for the top, and two for the sides.

7. Adhere the weatherstripping to the door.
    a. If the product features an adhesive back, peel it away and press it into place around the perimeter of the door jamb, not the door itself.

8. Test the door to make sure it opens and closes properly.

WEATHERSTRIPPING ATTIC DOORS & LOCKS

01

Clean the attic door and door jamb.

02

Take measurements along both sides of the door as well as the top and bottom of the door.

03

Tighten the door hinges.

04

Measure the gap between the door and the jamb.

05

Select the weatherstripping based on your door measurements.

06

Cut your weatherstripping into segments to size.

07

Install weather stripping along the inside door frame and threshold.

08

Install a latch that will pull the door tight to the frame and the weather stripping. If your attic door is framed into a wall, do not undercut that door. If it is framed into a ceiling, seal any gaps between the door and rough opening with caulk, backer rod, or foam. An undercut is the distance between the bottom of the door and the door frame itself.

09

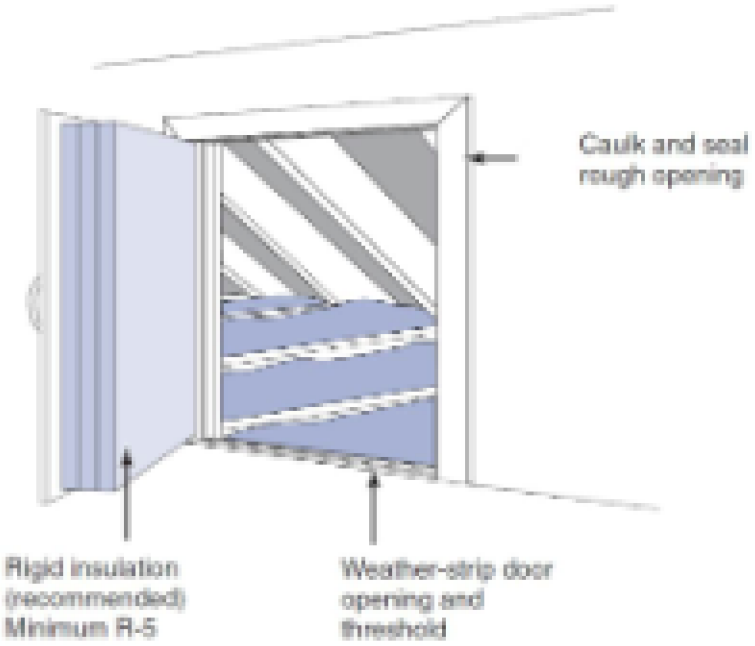
At your sole discretion, insulate the attic side of any wall attic access doors/panels by gluing rigid foam to the back side for an additional thermal break. A thermal break is an element of low thermal conductivity placed in an assembly to reduce or prevent the flow of thermal energy between conductive materials.

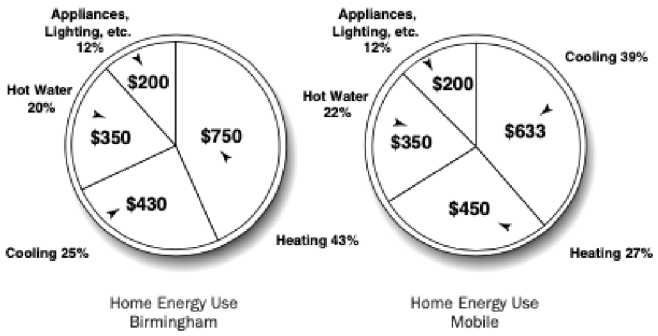
10

Test the door to make sure it opens and closes properly.

FREE KITS

Get an energy savings kit free of charge from SWEET Alabama and lower your monthly bills.





Energy Literacy: Understanding Units That Measure Energy

Watt (W) - A watt is the basic unit of power used to measure electricity capacity and is equivalent to one joule per second. The higher the watt rating (e.g., 40, 60, 100W), the brighter the light. LED bulbs use far less watts to produce the same amount of light.

Kilowatt (kW) - A kilowatt is 1,000 watts.

Kilowatt hour (kWh) - A kilowatt hour is 1,000 watts used for one hour (power x time). It is the unit of energy most commonly used on household electricity meters.

Therm - A therm is the energy equivalent of burning 100 cubic feet of natural gas.

TERMINOLOGY TOOLBOX

Caulk
/kôk/: a waterproof filler and sealant, used in building work and repairs.

Crawlspace
/ˈkrôl ˌspās/: an area of limited height under a floor or roof, giving access to wiring and plumbing.

Energy Burden
/ˈenərjē ˈbərd(ə)n/: percentage of household income that goes toward energy costs (electricity, home heating, etc.)

Faceplate
/ˈfāsˌplāt/: the covering of the front of an electrical device, outlet or light switch.

Galvanized Ductwork
/ˈgalvəˌnīzd ˈdəktwərk/: coated steel with a thin zinc layer used most often for building ducts. This material's zinc coating helps prevent corrosion and rust buildup.

Insulation
/ˌinsəˈlāSH(ə)n/: material used that reduces heat loss or heat gain by providing a barrier between the inside of your home and the significantly different temperature outside.

Jamb
/jam/: a side post or surface of a doorway, window, or fireplace.

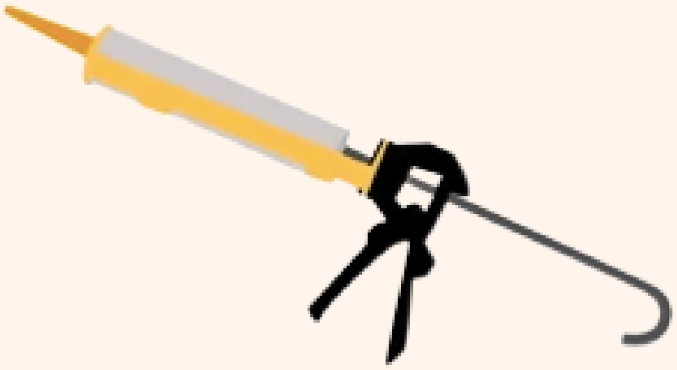
Mastic
/ˈmastik/: high-grade construction adhesive commonly used to bond ceiling, wall, floor, etc.

Outlet Gasket
/ˈoutˌlet ˈgaskət/: foam material used to seal off the wall cavity behind outlets & switch areas from the living space.

Vent
/vent/: an opening that allows air, gas, or liquid to pass out of or into a confined space.

Weather Strip
/ˈweT̲Hərˌstrip/: a strip of material to cover the joint of a door or window and the sill, casing, or threshold so as to exclude rain, snow, and cold air.

TERMINOLOGY TOOLBOX



Caulk/Caulking Gun

Crawlspace

Galvanized Ductwork

Insulation (Foam)

TERMINOLOGY TOOLBOX

Jamb

Mastic Sealant

Outlet Gaskets

Weather Strip