

Northeast Oklahoma REC's  
*Do It Yourself*  
**Home Energy Audit**  
Platinum Level  
Start today and start saving!

First project (circle and initial when completed) \_\_\_\_\_

**Inadequate  
Ducts**



**Objective:** Check your ductwork for insulation, air infiltration and make sure it has not disconnected.

**Incentive:** Ductwork can suffer from lack of insulation, no insulation, poorly sealed joints, tears, or be totally disconnected. These common problems can cost energy dollars.

- What to do:**
- Have a professional check for inadequate ducts.
  - Use mastic to seal metal duct work or metallic tape to seal fiberboard ducts.
  - Insulate ducts with little or no insulation.

**Tips:** If the joints of the ductwork are masked over by duct tape this could be a sign of problems in the past or of improper installation. Metal ductwork should be sealed with mastic and fiberboard ductwork should be sealed with metallic tape.

The best flex ducts are covered with 2 inches of insulation and a shiny silver jacket. Black and white jackets will deteriorate at a quicker pace.

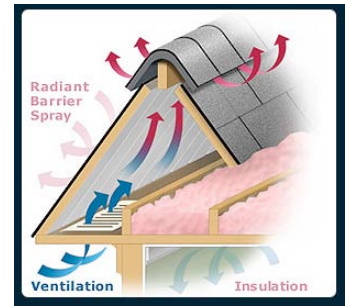
The insulation value of ducts lying on the floor of an attic can be improved by mounding over additional blown-in insulation.

Flex ducts are more fragile and can develop holes and tears over time. A professional can determine when to replace them.

Flex ducts shouldn't be pinched down or sharply bent along its path. These conditions affect the air flow and efficiency.

Second project (circle and initial when completed) \_\_\_\_\_

## Attic Ventilation



Objective: Check your attic for proper ventilation.

Incentive: Attics need proper ventilation to remove summer heat (up to 160°) and damaging condensation in the winter. The excessive heat can be absorbed into the home and the condensation can lead to an unhealthy environment.

- What to do:
- Install ridge vents and many soffit vents. Experts agree this is the best combination for venting an attic. This system has no moving parts so there is no maintenance. It allows natural physics to draw air into the soffit vents, mix with the air in the attic and flow out through the top at the ridgeline.
  - The amount of total vent space needed is one sq. ft. of vent space for every 150 sq. ft. of attic area. Half the vents should be located in the soffit and half in the top (ridge vents).

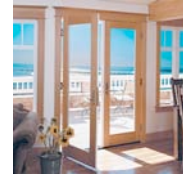
Tips: There is a new procedure for attics that is gaining popularity. It has been labeled as an “unvented attic”. Existing vents are sealed, spray foam insulation is applied to the underside of the roof, and a conditioned air source is installed. In this case an unsealed attic hatch is left in place to act as the return air. The attic becomes a conditioned space.

Roof vents (not turbine or power vents) can be used in place of ridge vents.

Soffit vents should not be blocked. Use rafter chutes to keep an open flow of air from the vent to the attic.

Third project (circle and initial when completed) \_\_\_\_\_

## Sliding Glass Doors



Objective: Checking your sliding glass doors for air leakage.

Incentive: All sliding-glass doors have air leakage. Some are built better than others but they all have energy efficiency problems. Harsh outside air can infiltrate into your home and conditioned air can escape costing you valuable energy dollars.

What to do:

- Consider replacing a sliding-glass door with a quality French door. A French door can be properly weather-stripped to block air infiltration.

Tips: Test your sliding-glass door: (Turn off all sources of inside air including ceiling fans.) On a windy day, tape long, thin strips of tissue paper where the two panes of glass meet and along the jam near the latch. Watch for movement of the strip of paper as the wind blows against the exterior facing of the door. (You can also use the smoke from an incense stick for the test).

From the exterior, check the underside of the door's threshold for gaps and deterioration. This can be another source of air infiltration. Seal the gaps with caulk or use spray foam insulation for larger cracks.

The interior of the home becomes pressurized when the air-conditioner or heater is operating. This forces the air to naturally find the weak areas to escape to the outside. A sliding-glass door can easily be a weak area.

A French door with one fixed door and one operating door usually seals much better than a French door with two moving doors.

Fourth project (circle and initial when completed) \_\_\_\_\_

Programmable  
Thermostat



Objective: Install and properly utilize a programmable thermostat.

Incentive: You can establish a program that automatically reduces heating and cooling in your home when you don't need as much. This will make your home more energy efficient.

What to do: • Consider having a professional install and program a quality programmable thermostat.

Tips: The following is an example of a typical schedule.

| Programmable Thermostat Set-point Times & Temperatures |           |                              |                              |
|--|-----------|------------------------------|------------------------------|
| Setting  | Time      | Set-point Temperature (Heat) | Set-point Temperature (Cool) |
| Wake   | 6:00 a.m. | ≤ 70° F                      | ≥ 78° F                      |
| Day  | 8:00 a.m. | Setback at least 8° F        | Setup at least 7° F          |
| Evening  | 6:00 p.m. | ≤ 70° F                      | ≥ 78° F                      |

Heat-pump owners will want their HVAC professional to select and install a special programmable thermostat.

A programmable thermostat must be properly setup and utilized in order for it to provide energy efficient benefits.

Improve the energy efficiency of a manual thermostat by adjusting the temp daily before you leave the house and when you go to sleep. Typically, adjusting the temperature (down in winter, up in summer) can help save energy if you're going to be away from home for several hours.

Congratulations!

You have completed the Northeast Oklahoma Electric Cooperative's  
Platinum Level Home Energy Audit.