

# Beat the heat through these maintenance tips

## Tune up your AC for comfort and efficiency

**Miles Dyson**  
Living Green



OK, the wind has stopped blowing – now it's really hot! I am already getting homeowner calls for help to improve summer comfort indoors.

First things first, do you know if your air conditioning unit is working like it's supposed to? The Air Conditioning, Heating and Refrigeration Institute (AHRI) provides the following advice on AC maintenance:

- Check the air filter and change it if it's dirty, or according to the manufacturer's recommendation, to keep dust from collecting on the evaporator coil fins. Keeping your filter clean can cut energy consumption 5 to 15 percent. Turn off the power to the furnace before pulling the filter out so that the fan doesn't come on and blow dust throughout the home. Be sure to position the new filter according to the manufacturer's instructions.
- Clear away leaves, grass, weeds, plants and other debris that block airflow through the outdoor condensing unit, which is the large metal box in your yard next to your home. Anything that collects on the unit's fins will block airflow and reduce its efficiency. Grass clippings thrown by the lawn mower are particularly common offenders.
- Occasionally clean the outdoor condensing unit by spraying it with a water hose.
- Check to make sure air conditioning vents inside your home are not obstructed by furniture, especially the main return grill.
- Closing off unused rooms and closing vents in those rooms can help; however, you should consider adding zone controls to automatically set back the temperature in unused areas. Doing so can cut cooling costs as much as 20 percent.

- Set the fan speed on high except in very humid weather (if your unit has this option). When it's humid, set the speed on low – you will get less air movement, but the extended cycle times will remove moisture from the air and will make it feel cooler.

If these maintenance items don't cut it, call one of our local qualified heating and air conditioning service companies. Be sure to insist that the technician:

- Check for the correct amount of refrigerant and test for refrigerant leaks.
- Capture any refrigerant that must be evacuated from the system.
- Check for and seal duct leakage in central systems.
- Measure airflow through the evaporator coil.
- Check the accuracy of the thermostat.
- Verify the correct electric control sequence and make sure that the heating system and cooling system cannot operate simultaneously.
- Inspect electric terminals, clean and tighten connections, and apply a non-conductive coating if necessary.
- Check belts and oil motors for tightness and wear.

After you know that the AC is tuned and ready you can still improve comfort and reduce electricity use:

- Don't try to cool the great outdoors. Consider blower door testing and follow up weatherization work to keep cool air inside.
- Install and learn to use a programmable thermostat – don't keep the AC running at full capacity when no one is home.
- Use room and ceiling fans, they are inexpensive to run and they can make it feel 5 degrees cooler. There is no benefit to overall home temperature or comfort if fans run without people under or in front of them – turn 'em off when you leave.
- Our high desert nights allow it to cool off



**Stay cool this summer by properly maintaining your rooftop mounted package air conditioner and gas heating unit.**

quickly after dark, open windows at night and in the morning to let the crisp air in – don't forget to close up the house before you kick the AC back on.

- The biggest heat load in summer comes through roof mounted skylights and east and west facing windows. Plants, awnings or solar screens that shade windows and skylights let you remove less heat from the house with expensive air conditioning.
- Plan cooking and laundry for the coolest hours of the day, a batch of brownies cooked in the heat of the day can raise the kitchen temperature 10 degrees. Knock the rust off the grill to cook outside and run the dishwasher and dryer overnight.
- Interior house lighting creates heat as a by-product; try to use indirect day lighting when it is available for indoor tasks. Also consider CFL or LED bulbs and fixtures that give off a fraction of the heat output

of standard incandescent bulbs.

- Isolate and cool your attic. Check your insulation level at the ceiling. Many houses built before the '80s have minimal or incomplete attic/ceiling insulation (blown in Fiberglas or cellulose insulation is cheap to add to an accessible attic). If you replace a roof, make sure your new roof material is light colored or reflective. This will reduce temperatures in the attic space and will extend the life of the roof decking as well. You can enjoy our long desert summer more if you get control of air conditioning comfort and cost right now.

*Miles Dyson is the owner of Inspection Connection LC - Professional Home Energy Rating and Home Inspection Services in Mesilla Park and can be reached at 202-2457. Dyson is a RESNET certified Home Energy Rater and ASHI certified Home Inspector.*