



## Summer Cooling with a Whole-House Fan

By Rick Bunzel

Mountain View Property Inspections

Looking for a little more cooling for your home and want the most for your investment? One consideration is to install a whole-house fan. A whole-house fan can create a breeze in just about every room of your house at the same time. After sunset, the fan can rapidly cool the house by replacing hot, stale air with refreshing, cooler evening air. A large-sized whole-house fan can replace all of the air in your house every two minutes. Smaller-capacity fans will also deliver cool air into your home, but at a reduced rate.

A whole house fan is installed in a central area such as a hallway in the highest point in the home. A whole-house fan is best used when the outside temperature is slightly cooler than the inside temperature. For example in my home we will typically use the whole-house fan in the early morning and then close up the windows and doors on the southern exposures. We will continue to keep windows open on the northern side of the house and draw air from there. If the day is warm we may discontinue using the fan to avoid bringing hot air into the house. In the early evening we will open the house back up and vent the house. With the fan on high and with windows open in only one room, you can create a virtual windstorm as air travels through the room and toward the fan. The trick is to open just enough windows so you get a breeze that comforts you.

You must install a timer switch with these fans, or they'll make you cold as they deliver very cool night air. All manufacturers offer timers as standard or as options.

Whole-house fans and air conditioners should never be used at the same time. Air conditioning is usually turned on when heat and humidity become unbearable. Air conditioners are designed to lower the humidity in household air. This less-humid air allows air to evaporate from your skin at a faster rate. If you air-condition your house during the day and then turn on the whole-house fan at night, you remove this dry air from your house. Use your air conditioner only when the whole-house fan can't provide you with comfort.

Installing a whole-house fan can be challenging. New installations require a separate electrical circuit and the possible installation of multiple roof vents to exhaust the vast amount of air that is being pumped into your attic. The instructions that come with whole-house fans are specific about the amount of attic ventilation space required to allow the fans to operate at peak efficiency.

Hire a professional unless you feel comfortable installing electrical lines, roof vents and cutting holes into your ceilings. Houses that have prefabricated trusses require special consideration and require whole-house fans that are meant to be used with trusses.

**Rick Bunzel is the Principle Inspector at Mountain View Property Inspections. If you would like to know more about your home go to [WWW.MVPinspection.com](http://WWW.MVPinspection.com) If you have questions or comments, Rick Bunzel can be contacted at Mountain View Property Inspections @ 303-443-9063 or [MVPInspection@attbi.com](mailto:MVPInspection@attbi.com)**