



I'm A Big Fan of This Fan

Last week I wrote a scathing piece on attic fans, but I promised today's article would "take a look at a fan I can really recommend". Have you guessed what fan I had in mind yet? There are actually two other types of fans I could recommend, but this week I'll cover just one of them and leave the other a mystery until next week.

Most of you have experienced a ceiling or "paddle" fan at some point, but I see a lot of homes that could benefit by having one or more installed. Conversely, I should point out I've also seen some homes with "ceiling fan overkill" – read on and I'll explain. These fans can save energy in winter as well as summer while also increasing comfort. It helps to understand why, as well as how they should be selected, installed and used in order to realize their full potential.

In summer, the cool breeze from a ceiling fan blowing down over you helps evaporate moisture from your skin which, in effect, makes you feel 4 to 5 degrees cooler than you would without the breeze. As a result, your air conditioner's set point can be set about 4 to 5 degrees warmer than you'd normally have it, saving big on your cooling bill. You'll also avoid needing to use your air conditioner at all during mildly warm weather. Of course if you don't have air conditioning you won't save anything on cooling costs, but you'll be a lot more comfortable! The energy used by a ceiling fan isn't that huge – about 100 watts on high speed – but you can reduce that energy by using the lowest speed necessary for the cooling you need. But while we're on the subject of energy use, a ceiling fan spinning in a room without someone under it (benefiting from the breeze) is basically just adding 100 watts to your electric bill; turn them off when you're not in the room to save still more energy.

In winter, the direction of the fan (if it's reversible) can be reversed so the air flows upward, spreading warm air at the ceiling level out towards the exterior walls, where it cascades down and along the floor before returning back up the center of the room to the fan. Blowing the air up, it turns out, greatly reduces the speed of the air moving past your body so you don't feel cooler. Otherwise you might feel the need to turn the thermostat up in winter to get comfortable. That said, there are cases where it may make sense for blowing the air downward in winter as well as summer. Those cases include homes where hot air stratifies up at the ceiling and cold air pools at the floor – this is often the case with wood heat, homes with poorly designed or installed forced air distribution systems (ie, ducts with supply registers and return grilles), or two-story homes with just one thermostat downstairs.

When picking a fan, one with a reversible motor would be useful if you don't fall into the cases mentioned above. Fans with larger blades will move more air, so pick the largest fan that matches the size of your space (most retailers or installation contractors should give you this information on the

fans they carry). Some fans can be a bit noisy so, if at all possible, listen to the sound the fan makes before you buy it.

When installing a fan, put it in the room(s) you most frequently occupy. Be careful to install it properly as, if it's out of balance, what sounded quiet in the showroom will drive you crazy in your home (the visual impact of a ceiling fan swinging wildly out of control is annoyingly distracting too). They work best when the blades are 7 to 9 feet above the floor and 10 to 12 inches below the ceiling; don't install one with a ceiling less than 8 feet high unless you want to decapitate tall people. They should also not be installed in a location where the blades would be closer than 8 inches from the ceiling or 18 inches from a wall.

If the room is larger than 18 to 20 feet long, you may need more than one, but I wouldn't install one over spaces that aren't occupied for any significant amount of time (entryways, circulation space between living/sleeping areas, etc). They work best if they're six feet (small fans) to ten feet (large fans) away from where you'll be sitting.

Next week we'll take a look at another fan I can really recommend

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