



Buy a furnace filter based on your particular needs and budget. Rely on the filter's MERV rating, not the number of pleats. A MERV rating of 7 or 8 works best for most homes.

QUESTION

Which furnace filter do I buy?

I am thoroughly confused about furnace filters. I thought I was supposed to get one with the highest possible MERV rating. Now I'm reading that those filters may damage my furnace and raise my energy bills. What filter should I buy for my furnace?

The answer depends on how much you want to spend, what you're trying to filter, and how diligent you are about changing the filter.

The minimum efficiency reporting value (MERV) scale goes from 1 to 16. Most residential filters range from 4 to 12. Furnace manufacturers prefer the traditional spun fiberglass filters (MERV 2) because they filter out enough of the large particles to protect the furnace while providing maximum airflow. Maintaining the furnace manufacturer's specified airflow is critical to achieving energy efficiency and maximum life from the blower motor and heat exchanger. A MERV 4 filter (75¢ to \$2) captures 80 percent of the particles 50 microns and larger, but only 25 percent of the particles in the 3 to 10 micron range.

For most homeowners, a MERV 7 or 8 pleated filter (\$3 to \$8), provides a good balance between cost and filtration efficiency. These filters trap 80 to 95 percent of the particles 5 microns and larger—more than enough filtration for most households.

Furnace efficiency is one thing. But if you're a clean freak or have family members with allergies or low-immunity issues, spend more (\$8 to \$20) on a high-efficiency (MERV 11 and higher) filter. Then just make sure you stay on top of filter changes to protect your furnace.

High-efficiency filters capture 99 percent of airborne particles as small as 0.3 microns (bacteria and viruses, fumes and pollen). But you'll have to run your furnace fan full time to get the maximum benefit from a high-efficiency filter. That'll cost you about \$300 per year. Figure the extra cost into your decision.

Finally, never switch from a fiberglass filter to a high-efficiency filter without first talking to your HVAC technician. The technician can boost fan speed to compensate for the reduced airflow. Even then, you still have to be diligent about replacing the filter regularly (see "Is Your Furnace Filter Clogged?" on p. 64). A clogged filter can burn out the blower motor, damage the heat exchanger and cost you hundreds of dollars in wasted energy.