

DIY HEPA Filter

Why spend \$1000 on a room-size air filter for your home, when you can make one for \$50? You only need three items: an ordinary box fan and two disposable HEPA filters. You can even use a reusable, washable filter, but those are less effective. The higher the MERV (Minimum Efficiency Reporting Value) of your filter, the more dust particles and contaminants are removed from the air. For instance a MERV filter with a thirteen rating captures up to 90% of particles. Most household filters are rated between eight and thirteen, and filters used in hospitals and surgery facilities use filters rated between fourteen and twenty.



MERV Rating

What MERV rating should I use? Pleated home furnace filters come in several grades-MERV 8, MERV 11, MERV 13. The higher the MERV rating the more dust particles and other particulate matter are removed from the air.

What is MERV?

- MERV stands for Minimum Efficiency Reporting Value. Or in other words, how effective is your air filter?
- MERV ratings range from 1-20. Most residential home air systems can adequately remove airborne contaminants with a filter rated between MERV 8-13. The higher the MERV rating on a filter, the fewer dust particles and other contaminants can pass through it.
- Some of the common particles that filters are tested for include pollen, dust mites, textile and carpet fibers, mold spores, dust, pet dander, bacteria and tobacco smoke.

What You Will Need:

1-20x20 Box Fan

1-Pleated Furnace Filter MERV 13

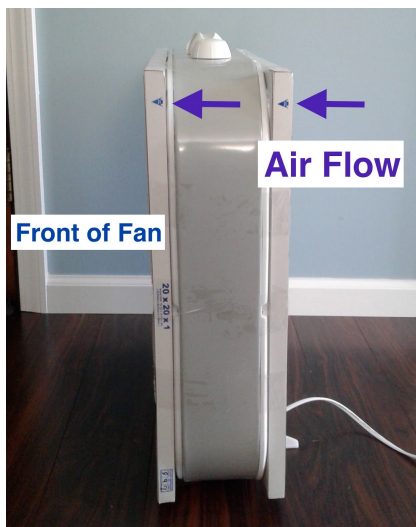
1-Pleated Furnace Filter MERV 8

Packing Tape

Get Started!

1. Use packing tape to attach the filter with the lower MERV rating to the back of the fan. Making sure to place it in the correct direction for the Air Flow.

You will see an arrow on the side of the filter indicating which way air should flow through the filter. (see picture)



2. Attach the second filter to the front of the fan making sure to note the direction of the Air Flow.

3. Write the date on the side of the filter and change them as needed.

4. Place in a window and turn it on!