

HEPA air filtration units, aka air purifiers, remove the tiny particulate matter (PM) in wildfire smoke that can cause problems with our hearts, lungs, and [mental health](#). But it's crucial to buy the right one and use it properly. For recommendations and more info, click on the buttons above, or just scroll down. For more about the health effects of wildfire smoke, and who might benefit most from a HEPA air filtration unit, check out our [Wildfire Smoke](#) page.

What's a HEPA Air Filtration Unit?

HEPA air filtration units, also known as air purifiers, are portable appliances that filter out really tiny particulate matter (PM) - 2.5 microns and smaller. These ultrafine bits are the most common and dangerous component of [wildfire smoke](#), which is rolling into the Missoula Valley more frequently as our climate changes.

Portable HEPA air filtration units typically come with replaceable pre-filters that also remove larger PM, including allergens such as pollen, which is becoming more of a problem as allergy season gets longer. And one more bonus: because they blow out filtered air, they double as fans!

HEPA air filters are available for central heating and cooling systems as well, but here we'll be talking exclusively about portable filtration units that use small HEPA filters inside. These you can plug into a standard wall outlet in your home. Their size varies depending on the size of the room they can filter.



How Do I Know Which Model to Buy?

Most importantly, **make sure the unit uses a genuine HEPA air filter**. Other filter types and air purification methods may not filter the smallest PM that causes the greatest health problems, and some release small amounts of ozone gas - which isn't good for people or the planet! Avoid "HEPA-like" units.

Other key considerations:

- **PM size.** Make sure the air filtration unit you choose filters the smallest particulate matter (PM) possible. Some units only filter down to 3 microns - which means they do NOT filter out smoke. The best units we found filter down to 0.3 microns.
- **Room size.** Buy the right air filtration unit to fit the room where you'll use it most frequently. (We recommend the bedroom; see below.) Most units list the size room they can filter effectively. Some list a Clean Air Delivery Rate (CADR). In this case, choose a tobacco smoke CADR at least 2/3 the room's area. For example, a 10' x 12' room (120 square feet) would require an air cleaner with a tobacco smoke CADR of at least 80.
- **Filter maintenance.** Some HEPA filters must be replaced from time to time. Others can be cleaned with occasional washing or vacuuming. Consider how much cleaning you're capable of doing, how much you're willing to spend on replacement filters, and how much waste you're comfortable creating! We like the ones you can clean.
- **Noise level.** Some units are noisier than others. If this is a concern, check user comments and feedback online.

Flip to the Back for Recommended HEPA Purifiers, and How Best to Use Them

For more info, see Climate Smart Missoula's *Wildfire Smoke* and *Summer Smart* pages at climatesmartmissoula.org
Contact us: info@climatesmartmissoula.org, 406-926-2847

* And check out links to to all the pages highlighted in [blue](#) on our website, too!

HEPA Air Filtration for Wildfire Smoke

Units We Recommend

All of these air filtration units filter PM as small as 0.3 microns and have an Energy Star rating. They are all available online, and some are available in local stores. Prices vary depending where you buy them. These are by no means the only ones, just a helpful start.



- The [Winix 5500](#) works for rooms up to 350 square feet and costs about \$170. It has a washable HEPA filter and comes with four replaceable carbon pre-filters. According to some friends of ours, it's also particularly quiet. This unit is available online and *may* be available at Home. Winix air purifiers are made to last, AND the company is working with us to get these at a discount so we can provide them to homebound seniors. Thanks Winix!
- The **Lasko Pure Silver HF25610** works for rooms up to 170 square feet and costs about \$150. It has replaceable filters and is available at ACE Hardware.
- The **Honeywell HPA 160** works for rooms up to 170 square feet and costs about \$110. It has replaceable filters.
- The **Germ Guardian AC4825** works for rooms up to 150 square feet and costs about \$90. Replace the filter when it turns gray.
- The **Honeywell HPA060** works for rooms up to 75 square feet and costs about \$70. It has replaceable filters.



Got One! Now How Do I Use It?

We highly recommend using your HEPA air filtration unit **in your bedroom at night**. This way your body gets a break while you sleep, and for most people, this is the longest period of time you'll spend in one room. However, **people who are homebound may get greater relief using their units in a living room** or somewhere else where they spend a good amount of time.

HEPA air filtration units work best when all windows and doors are closed. This works well for indoor allergies in the winter, but it can be more complicated with hotter weather during wildfire season. During [Hotter Days](#), we generally recommend closing windows and blinds to keep your home cool, then opening them **back up at night** to draw in cool air. So in this case, running the filter during the day in the room where people hang out might be best. When it's both smokey and hot, it's complicated. Luckily they do not use much energy to run, so keep them on!

Ideally, air filter users can open bedroom windows in the early evening and close them again just before going to bed and turning on their air filtration units. But if your home is just too hot, it could be more important to cool off your bedroom than to clean the air. Fans can also help, as can air conditioners set on recirculate (if the A/C filter is clean). For more tips on how to cool your home, see our [Hotter Days, Warmer Nights](#) page, and our page on [Fans, A/C, and Coolers](#).

For more info, see Climate Smart Missoula's **Wildfire Smoke and Summer Smart** pages at climatesmartmissoula.org
Contact us: info@climatesmartmissoula.org, 406-926-2847

* And check out links to to all the pages highlighted in **blue** on our website, too!