

<https://iaq.works/purification/how-to-tell-if-an-air-purifier-is-effective-simple-steps-to-test-it-yourself/>

How To Tell if an Air Purifier is Effective: Simple Steps to Test it Yourself

When it comes to cleaning, we are accustomed to instant results and black and white proof. A wipe of the counter results in crumbs, a swipe of windex produces a clear view. Indoor air quality solutions aren't always as clear-cut. And because we cannot see air particles with the naked eye, it's easy to start to doubt whether or not an air purifier is even working to eliminate indoor pollutants.

So, maybe you've taken the plunge and bought an air purifier or air purification system, but want to test it yourself to make sure it's working. Or perhaps, you're considering investing in a purifier and not only want to make sure they work but make sure they're effective at improving IAQ. Here are a few easy ways to test an air purifier yourself.

Is My Air Purifier Working?

We promise—you are not the first person to ask that question. While air purifiers are a popular air quality solution on the market, they operate in the background to provide cleaner air, which can cause a bit of suspicion. Whether you simply can't tell and want peace of mind or are looking to test the purifier's efficacy, we can suggest a couple of steps. Keep in mind that the tests look a bit different depending on the system, method of purification and whether it's a whole-home solution or portable purifier.

Portable Units – Determining if a portable or single-room unit is working requires only two steps:

1. Airflow Test

First, check the system's airflow. A working air purifier features clear, consistent airflow. If the purifier is clearly not blowing out air (easily determined by placing your hand in front of the system) then there's likely a problem. If you are unable to hear anything, that's also a sign the purifier isn't working. Conversely, if there is a lot of noise coming from the unit or it seems like the purifier is exerting extreme effort to blow air—that's also a problem. You're looking for the ideal middle sweet spot when it comes to airflow.

2. Filter Test

The filter test simply means examining the internal filters that come with the device. A full or dirty filter is a sign that the system is working. That means air is entering the device and the filter is capturing pollutants before air leaves the device. However, once the filter is dirty or clogged, it's important to change it. A full filter, while a good sign, makes it harder to push air through and the purifier can no longer work efficiently. Good filtration is crucial for air purification. That's why it's important to routinely check and change system air filters.



Portable Air Purifiers Are a Waste of Money: Portable home air purifiers are not as efficient at cleaning and filtering the air in your house. They work much harder than whole-home systems to do this, so you may need more of them for an equivalent result! [Learn More →](#)



Whole-Home Purifiers

Testing whole-home purification systems differ from standalone units. It even differs for the type of whole-home purifier. For example, a whole-home media air filter means the best method is a filter test just like with portable units. For other types of whole-home air purifiers, it's a bit trickier.

Bipolar ionization and photocatalytic oxidation are two popular whole-home purification system technologies that are difficult to test on your own. Why? These methods reduce indoor pollutant levels by literally eliminating the pollutant. That means you cannot see the contaminants captured in a dirty filter, or something similarly rewarding. Instead, you resort to other methods.

1. Odor Test

The first option is an odor test. The best and most effective whole-home air purifiers target three types of contaminants: germs, gases and particulates. That includes odors. To test a whole-home air purifier, you need to make the space smell. Cook the smelliest food you can think of, or let the wet dog indoors, or burn potent incense—something that produces a noticeable odor. Then, simply turn the HVAC system fan on and notice as the odor dissipates. That is proof the air purifier is working.

2. Dust Test

Another option is a dust test. Or rather, a lack of dust. One of the best aspects of whole-home purifiers is that they effectively treat the entire home. That means less dust throughout your living space. And a lack of dust is a noticeable change for most homeowners.

3. Airflow Test (...But Different)

The final test is an airflow test. It is possible with whole-home systems, but it requires a different method. It means making sure the entire home has a healthy airflow balance. Make sure vents are open and not blocked by furniture or miscellaneous items. Because whole-home systems install directly into the HVAC system and work with the existing ductwork, purification depends on good air circulation.



Whole-Home Active Air Purifier: If you want the best solution possible and have the time to invest in it, then this is the right choice. Air purification is proven to be beneficial for your health and can improve allergies by removing allergens from the air around you. [Learn More →](#)

Tests That Work For Both Systems

In addition to the system-specific options, there are two final methods to ensure an air purifier is working and working efficiently that apply to both portable and whole-home units.

1. Air Quality Monitor

An indoor air quality monitor is an easy way to verify that the air purifier is successfully doing its job. It is also a helpful and accurate method that can provide real-time data. It simply requires recording readings at different times. Monitor levels with the purifier off and then on and see what changes. Try it with the windows closed and then the windows open to see how the purifier does on its own and then in combination with natural ventilation. Test it overnight, test it when multiple people are in the home, test it when outdoor air quality is bad, just test and track! Not only can monitoring air quality levels and the effects of the purifier provide peace of mind, but it guarantees that the air purifier is working.

To really go the extra mile in your home, consider an in-duct air quality monitor. With it, you can notice trends in your home's air quality, store long-term data and it'll even pair with your smartphone.



Indoor Air Quality Monitor and Controller: The HAVEN system is a professional-grade air quality product combination that allows you to truly understand and control the air you breathe indoors.

[Learn More →](#)

2. Professional IAQ Testing

Finally, if you're still not convinced the air purifier is working or doing enough for your space, consider having professional testing done. A professional

indoor air quality assessment by an expert will quickly determine if and how purification is helping your space. Plus, IAQ testing helps assess other potential air quality concerns.

How Long Does it Take An Air Purifier to Work?

A final related question is: how long does it actually take to notice purification improving air quality? The good news: the device begins the moment it is turned on or the entire time your home's HVAC system is on and blowing. How quickly you will actually notice the effect will depend on the exact source of pollution. On average, a change is noticeable as quickly as a half-hour with solid air quality improvement after a few hours.

The Power of Air Purification

While we do not judge the need to test your air purifier and verify it's working properly, just because air pollutants are invisible doesn't mean the results should be too. Yes, purifiers can be a bit of a mind game. However, a good, effective and high-quality purification system targets multiple pollutants resulting in noticeably cleaner air.