

How-To

Select an Air Purifier

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If you live in Southern California, you should consider purchasing an effective air purifier. It is important to research your purchase decision because some air purifiers are effective and some are not. While some are easy to maintain, others are so difficult or expensive to maintain that people stop using them.

The EPA has stated, and recently published studies confirm:

- Southern California air is terribly polluted and ranked worst in the nation.
- The air is full of dangerous tiny particles that affect our health — especially the health of children and seniors.
- Indoor air purification using HEPA filters can be effective at combating these problems.

Air Cleaning Methods:

1. Fan or fan-less? Purifiers with fans draw in air from around the room, purify and then widely recirculate the cleansed air. Fan-less purifiers attract only a small nearby volume of air toward internal dust collection plates, which must be cleaned every week or two. *Consumer Reports* tested and found a famous fan-less purifier to be “ineffective” at cleaning the air.

2. Filters. All filtering purifiers use fans and most use only one or two of three common filter types.

a. Activated Carbon filters are used to remove chemical vapors, gasses and smoke - such as from cigarettes and candles.

b. HEPA filters remove tiny particles, pollen, mold spores, bacteria and viruses, pet dander, dust and dust mites.

c. Pre-filters are not used in all air purifiers, but when they are, they trap the largest particles, allowing the other filters to work better and last longer.

3. Ultraviolet Light disinfects the air passing through the purifier and any filter-trapped particles.

4. Ozone neutralizes odors and disinfects the surrounding environment to some degree.

5. Ionization electrostatically charges molecules, which transfer their charge to other

particles on contact. Charged particles clump with oppositely charged particles making them large and heavy enough to either be trapped in a filter or too heavy to remain suspended in the air.

What you need to know to select a good air purifier:

- To eliminate airborne particles, you need HEPA and pre-filters. Ionizer boost their performance.
- To remove gases, chemicals, odors and fine smoke you need an activated carbon filter. Controllable ozone can also help. Not all ozone purifiers allow you to adjust ozone flow or turn it off. There are times when you want ozone and times when you do not.
- Ultraviolet light and ozone destroy mold and germs.

Maintenance should be a major concern. Some purifiers need an occasional filter or UV bulb change and nothing more. Others require astonishingly intricate disassembly routines to clean ionizing plates and wires. Almost everyone will tell you that their purifier is easy to maintain, but investigating user manuals reveals the truth. ***Before buying any purifier, look at the user manual, which should be available from the manufacturer's web site!***

Units that claim to be *maintenance free* or have *nothing to clean or replace* are not appropriate in Southern California. They do not remove particulates from the environment.

Coverage. Some air purifiers claim to clean your entire home. Others cover less space. Purifiers that claim to clean large areas don't work through walls. You must leave your doors open to treat other rooms. Their effectiveness decreases, as you get further away from them. It's better to use several smaller, quieter units instead of one large noisy unit.

Try it out. When you decide on one, make sure it has a satisfaction guarantee. Buy it and use it for a few weeks to see and feel the results.

Summing up:

Most air purifiers use one or two of the cleaning methods described above. Some use more, or even all of them. If you live in Southern California there's every good reason to believe that you will benefit from using an effective air purifier in your home and office.

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Tips on what to know when considering an air purifier.

- ✓ Length of warranty.
 - ✓ Return policy and trial period.
 - ✓ Does it have a multi-speed fan?
 - ✓ How quiet is the product?
 - ✓ Does it remove odors and chemical vapors?
 - ✓ Does it use a filter?
 - ✓ Find out what kind of filters it uses:
 - ✓ Pre-filter
 - ✓ Activated Carbon
 - ✓ HEPA
 - ✓ Does it have an ozone option?
 - ✓ Can it be controlled with a timer?
 - ✓ Is the amount of ozone production adjustable?
 - ✓ Will the other functions work if the ozone is turned off?
 - ✓ Does the unit actually capture and remove particles and pollutants from the environment?
 - ✓ Is it for a room or the entire house?
 - ✓ How often does the machine need maintenance?
 - ✓ What does the maintenance entail: cleaning, disassembly, ionizer plate scrubbing, part replacement, etc.
 - ✓ The cost of replaceable parts.
- Finally:** Go to the seller's web site and read the manuals for their products.