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Your Home

How to Select an Air Cleaner

By JAY ROMANO

AS consumers conserve energy by insulating their homes and installing efficient windows and tight-fitting doors, they are also sealing in allergens, odors and pollutants. For many, the solution is an indoor air cleaner.

Here, then, are some tips for sorting through the scores of different air purifiers on the market.

“If you are using forced air for heating or air-conditioning, the best way to clean the air in your house is to add a filtration module to your system,” said Alex Wilson, president of BuildingGreen in Brattleboro, Vt.

Mr. Wilson said that unlike portable air purifiers, which clean the air in just the room they are in, a filtration module added to a forced-air system will clean the air throughout the house. Such devices can cost $1,000 or more, not including installation, which will vary by location and job complexity.

Owners who do not have forced-air systems can choose from a number of different types and models of portable air purifiers.

Warburg Lee, a manager at Air-Purifiers-America.com, said that his company typically recommends room air purifiers that use high efficiency particulate air filters — HEPA, for short.

“There are three things you want to look at when buying an air purifier,” Mr. Lee said. The first is performance. With a HEPA filter, 99.99 percent of the particles 0.3 microns and larger will be trapped in the filter, he said.

The second factor is room coverage. “You don’t want to buy a small air purifier for a large room because it won’t be able to move the amount of air necessary,” he said.

The third factor — noise — is tied to the second. If an air purifier is too small for the space, Mr. Lee said, it will be necessary to run the fan at the highest setting to clean the air. And that, he said, can make a lot of noise.

So consumers should determine what size room a machine is designed for, and then get one with a slightly larger capacity than necessary so that it can clean all the air with the fan set on low.

Gary McEldowney, the marketing director for AllergyBuyersClub.com, said the cost of a purifier could range from $150 to $700, depending on size and features. Replacement HEPA filters cost $40 to $150.

An alternative to filters is an electrostatic purifier that uses a washable, electrically charged plate to capture pollutants. But there is some controversy surrounding these units.

Janice E. Nolen, an assistant vice president of the American Lung Association, said that electrostatic air purifiers typically emit ozone, which can cause problems for people with asthma and other respiratory ailments.

“We recommend that you don’t buy a machine that produces ozone either intentionally or as a byproduct of cleaning the air,” Ms. Nolen said.

Julie Vallese, the director of information and public affairs for the Consumer Product Safety

Commission, said that while her organization did not recommend one type of machine over another — and did not take a position for or against using an air purifier in the home — it had conducted a study on the health effects of ozone-generating devices.

“We found that keeping ozone accumulation below 50 parts per billion is sufficient to protect human health,” she said.

(Those considering an electrostatic purifier might want to make sure its ozone emission levels don’t exceed that recommendation.)

Jill Notini, a spokeswoman for the Association of Home Appliance Manufacturers in Washington, says her group has a certification system for comparing air purifiers.

“Every product certified by us has a label with a number that indicates performance,” she said. “The range is from 10 to 450; the higher the number, the better the performance.”

Consumers can compare certified models on the association’s Web site at www.cadr.org.