

Guide to Air Cleaners in the Home

2nd Edition: Portable Air Cleaners, Furnace and HVAC Filters

<https://www.epa.gov/indoor-air-quality-iaq/guide-air-cleaners-home>

To filter particles, choose a portable air cleaner that has a clean air delivery rate (CADR) that is large enough for the size of the room or area in which you will use it. The higher the CADR, the more particles the air cleaner can filter and the larger the area it can serve. Most air cleaner packaging will tell you the largest size area or room it should be used in. Portable air cleaners often achieve a high CADR by using a high-efficiency particulate air (HEPA) filter.

To filter gases, choose a portable air cleaner with an activated carbon filter or other filter designed to remove gases. Note that there are no widely used performance rating systems for portable air cleaners or filters designed to remove gases. The CADR rating system is for particles only. Activated carbon filters can be effective, provided that there is a large amount of material used in the filter.

A portable air cleaner with a high CADR and an activated carbon filter can filter both particles and gases.