

## TOP RATED AIR PURIFIERS

LEVOIT CORE 300 AIR PURIFIER      MEDIFY MA-40 2.0 AIR PURIFIER  
RABBIT AIR MINUSA2 AIR PURIFIER      BISSELL AIR320 AIR PURIFIER  
IQAIR HEALTHPRO PLUS AIR PURIFIER      COWAY AIRMEGA 300 SMART AIR PURIFIER  
ORANSI MAX AIR PURIFIER      DYSON PURE COOL TP04 AIR PURIFIER  
TRUSENS Z-3000 AIR PURIFIER      MOLEKULE AIR MINI  
THE 5 BEST HONEYWELL AIR PURIFIERS      THE 5 BEST LEVOIT AIR PURIFIERS  
BEST AIR PURIFIERS BY CONCERN  
THE 7 BEST QUIET AIR PURIFIERS      THE 7 BEST HIGH CADR AIR PURIFIERS  
THE 7 BEST H13 HEPA AIR PURIFIERS      THE 7 BEST OZONE-FREE AIR PURIFIERS  
THE 7 BEST UV AIR PURIFIERS      THE 10 BEST DESKTOP AIR PURIFIERS  
THE 7 BEST AIR PURIFIER FOR VOCS      THE 9 BEST AIR PURIFIERS FOR SMOKE  
THE 5 BEST AIR PURIFIERS FOR KITCHEN      THE 7 BEST HEPA AIR SCRUBBER  
THE 7 BEST AIR PURIFIER HUMIDIFIER COMBO  
TOOLS

[CADR CALCULATOR: FIND CLEAN AIR DELIVERY RATE](#)

[ACH CALCULATOR: FIND AIR CHANGES PER HOUR](#)

[ELECTRICITY CONSUMPTION CALCULATOR: KWH & BILL](#)

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# CADR CALCULATOR: CLEAN AIR DELIVERY RATE IN CFM & M3H

UPDATED ON SEPTEMBER 17, 2020 BY [REVIEWSOFAIRPURIFIERS](#) [LEAVE A COMMENT](#)



Clean Air Delivery Rate or CADR rating is the most significant factor when you choose an air purifier.

For different sized rooms and indoor air quality, you need to select your air purifier by the CADR rating. This advanced CADR calculator will help you to find out the minimum required CADR for your air purifier.

## CADR Calculator for Air Purifier:

### Enter Your Room Dimensions:

Room Area:  Square Footage  
 Length x Width

Enter Room Area (sq ft):

210

square foot

Ceiling Height:

8

ft

### Select Your Desired Air Changes per Hour (ACH):

Air Changes per Hour (ACH):

5

air changes per hour

*\*For better results, select a minimum of **2 ACH** for regular air cleaning, **5 ACH** for allergy & asthma, and **8 ACH** for smoke or heavily contaminated air. The higher ACH number means faster air cleaning in the same room.*

### Minimum Required CADR:

CADR in cubic ft/min:

**140 cfm**

cubic feet per minute

CADR in cubic meter/hr:

**238 m3h**

cubic meter per hour

Formula: **CADR** = [(ACH x L x W x H) / 60] cfm, and

**CADR** = [(ACH x L x W x H) / 60] x 1.699] m3h

# CADR EXPLANATION

CADR or Clean Air Delivery Rate expresses the efficiency of an air purifier like horsepower for cars. It determines the air purifiers' ability to filter the volumetric air within a specific time.

For example, A CADR of 200 cfm (cubic feet per minute) means it can filter 200 cubic feet of air in every minute on its highest fan speed settings. It also can be expressed as the cubic meter per hour (m3/h).

The term '**Clean**' means the filtered air and not the purification level. The ability to trapping airborne pollutants depends on the filter types. Such as, a true HEPA filter can capture 0.3 microns airborne particles with 99.97% efficiency.

## Check out our reviews:

- [The 7 Best High CADR Air Purifier](#)
- [The 7 Best H13 Air Purifier](#)

## SHOULD I CARE ABOUT CADR?

To understanding an air purifier, the CADR rating is the primary characteristic you need to look at it. To get effective air cleaning, you have to check on other aspects like filter types, filter surface area, efficient air intake and outlet design, and of course, you have to use it properly.

Please read our blog on [how to use an air purifier](#) to get the most out of it.

## AHAM'S CADR

AHAM, Association of Home Appliance Manufacturers, tested and certifies air purifiers with three different CADR ratings: Tobacco Smoke, Dust, and Pollen. Tobacco smoke CADR represents the efficiency against fine particles, and the Pollen CADR means the efficiency against the larger particles comparatively.

To find out the required Tobacco Smoke CADR, divided your room area (sq ft) by 1.55. For example, if you have a 15 ft x 20 ft room (8 ft ceiling), then the area is 300 sq ft. So, the required **Tobacco Smoke CADR** is  $300 / 1.55 = 194$  cfm.

Here, you can find the list of [AHAM-certified air purifiers](#) with room size recommendation. However, AHAM verification is not a must-have thing when you are going to buy an air purifier. The certification will give you some extra validity.



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## YOU MAY ALSO LIKE

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### ACH Calculator

Air Changes per Hour from CADR & Room Size



[Air Changes Per Hour  
Calculator from CADR &  
Room Size](#)



Air Purifier

### Energy Usage Calculator

Monthly Energy Bill from Daily Usage



[Air Purifier Electricity  
Cost Calculator: Monthly  
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**Top 7 Highest CADR**  
**Air Purifier**  
310 cfm - 560 cfm

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### TOP 5 BEST SELLERS IN AMAZON

BESTSELLER NO. 1

SALE

[VEVA 8000 Elite Pro Series Air Purifier HEPA...](#)

BESTSELLER NO. 2

[LEVOIT Air Purifier for Home Allergies and Pets...](#)

BESTSELLER NO. 3

**TaoTronics TT-AP006 Purifier for Home, H13 Air...**

BESTSELLER NO. 4

**Cabiclean 2 Set MA-25 H13 True HEPA Replacement...**

BESTSELLER NO. 5

SALE

**Honeywell HPA300 True HEPA Air Purifier,...**

**How to Choose an Air Purifier ?**



A Step-by-Step Guide

**What size Air Purifier do I need ?**



calculate the **CADR**

**7 Best Ways to use an Air Purifier**

→→ Get the most out of it

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