## Air Purifier Sizing Worksheet



This document is meant to help operators size portable air purifiers for short-term use only and should not be used to choose long-term filtering solutions. You must work with a consultant to size long-term filtering and cooling equipment. To maintain good indoor air quality, it is important to purchase the right sized air purifier. An air purifier's size is based

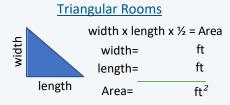
To maintain good indoor air quality, it is important to purchase the right sized air purifier. An air purifier's size is based on its clean air delivery rate (CADR), a measure of how much air per minute (CFM) the air purifier can filter.

Fill out the form below to find out the minimum size of air purifier that you need.

#### Step 1: Calculate the room area to pick the right sized air purifier

Measure the room, and use the forms below to calculate the area.

# Square and Rectangular Rooms width x length = Area width= length= length Area= $ft^2$



For rooms that are more complex shapes, break the rooms down into smaller simple shapes, calculate those areas, and add all the smaller areas together.





### Step 2: Input room and occupant characterisitics

The room dimensions characteristics of its users can impact the amount of filtration needed.

Input the room area and height below.

Area of room  $ft^2$  Height of room = ft

Answer the following questions to make sure you buy the right sized air purifier.

1. Do the occupants of the room have breathing difficulties or asthma? Yes No

2. What type of room is the air purifier going into?

Bedroom/Quiet Room Cooling Room/Communal Space Workspace

### Step 3: Final air purifier sizing

With all the information you have provided, you will need an air purifier that has the following specifications:

Minimum CADR = CFM

Maximum running noise level = dB

Filter type = HEPA or HEPA-true filter

If the unit lists different types of CADR, make sure that the smoke CADR exceeds the calculated number on the left.

A HEPA-type filter is not the same as a HEPA filter, which filters out 99.97% of hazardous fine particles (0.3 microns).

BC Housing suggests that operators choose an air filter that also has a carbon filter, which absorbs cooking and smoke smells.