

Shopping List:

- Box Fan (20x20x3" 75-watts or more)
 - \$50 at [Lowe's](#)
 - Save the cardboard box to make an optional/alternate shroud (see step 2, method 2)
- MERV-13 Filter (20x20x1)
 - \$25 at [Rona](#)
 - \$15.75 for 12 pack at [ULINE](#)
- Duct Tape Roll
 - \$7 at [Home Depot](#)
- Scissors or Box Cutter
- Ruler
- Pencil/Pen/Marker



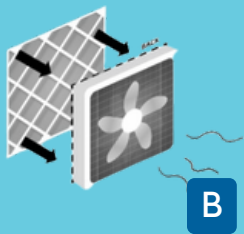
Build your own

DIY Air Cleaner

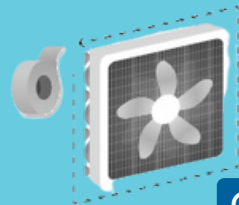
Step One: CONNECTING THE FILTER TO THE BOX FAN



A Insert feet into slots found on the underside of the box fan.



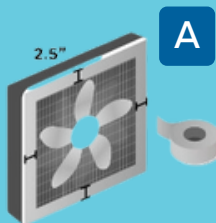
Look for the small directional arrows on the filter. Make sure the arrow is pointing toward the fan and place the filter directly on the back of the fan's case.



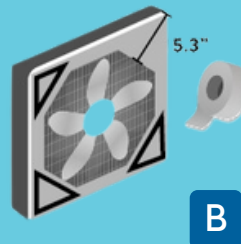
Secure edges with duct tape on all sides, sealing any gaps.

Step Two: MAKING THE FRONT FAN COVERING (ALSO KNOWN AS A SHROUD)

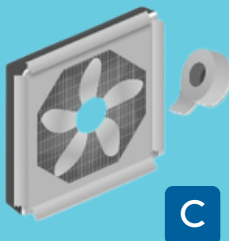
METHOD 1: USING DUCT TAPE ONLY



A Create a border around the edges of the fan that is 2.5" wide with duct tape.



B Tape the corners of the fan with duct tape. It should cover 5.3" from each corner.

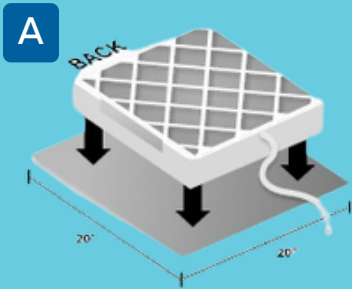


C Add more duct tape as needed to close all gaps around the edges and corners.

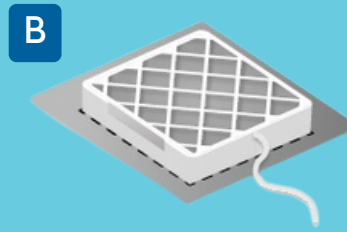
Step Two:

MAKING THE FRONT FAN COVERING (ALSO KNOWN AS A SHROUD)

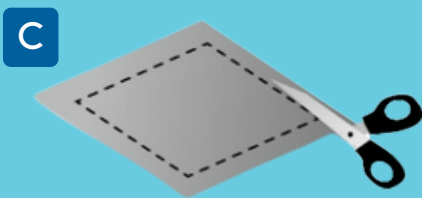
METHOD 2: CARDBOARD AND DUCT TAPE



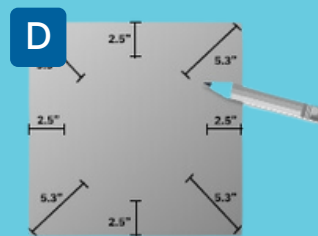
With a piece of cardboard (which can be taken from the fan's original box), place the fan onto the cardboard facing down.



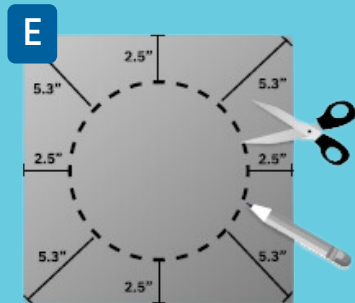
Trace the outline of the box fan using a pen or pencil. Tip: The back of the box fan is the side that intakes air.



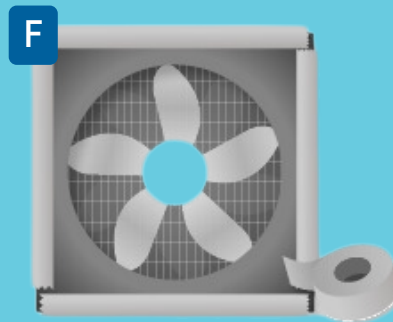
With scissors or a boxcutter, cut the traced shape out.



Measure and mark 2.5" from the cardboard edges inwards from the 4 sides, then measure and mark 5.3" from the corners to the center.



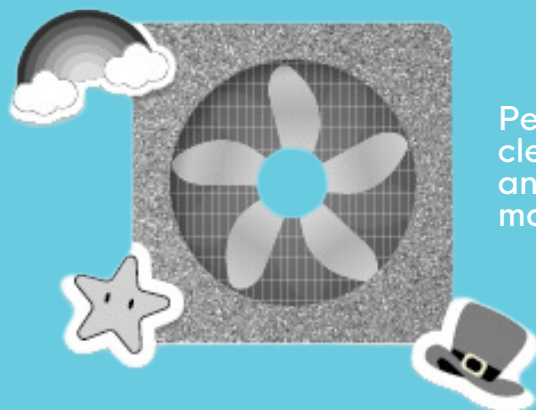
Trace a circle that touches all tips of the lines and cut out the circle.



Attach the cardboard shroud to the front of the fan with duct tape on all sides. Ensure there are no visible gaps between the cardboard and the fan.

Step Three:

DECORATE!



Personalize your air cleaner with stickers and decorative tape to make it uniquely yours.



DIY Air Cleaner Safety and Considerations

- 1 Air cleaners should be used with at least 4 feet of space away from walls, curtains or furniture
- 2 When used to reduce wildfire smoke indoors, windows must be closed to prevent further smoke from entering the room.
- 3 When used to reduce indoor particulate matter, windows should be left open if outdoor air quality is good.
- 4 Air cleaners should not be left running unattended.
- 5 The air cleaner should be plugged directly into the wall and not into an extension cord.
- 6 Use air cleaner on a hard surface (i.e. not on carpet) and facing upright
- 7 Replace the air filter when it is visibly dirty.
- 8 Do not cover the air cleaner with wet or dry towels, blankets or other fabrics
- 9 Try to place your air cleaner away from obstructions, so that air can flow to and through your device easily
- 10 Use the fan in areas you spend the most time in. The larger the space, the more units you may need. (1 per 150-500 sq. feet.)

Note: DIY air cleaners can help improve indoor air quality but are not a long-term solution to extended poor indoor air quality.

Air purifiers, including activated carbon filters and HEPA, do not reduce dangerous gaseous pollutants such as radon or carbon monoxide as their design focuses on solid particles.

Choosing the right design

Cube air cleaners AKA Corsi-Rosenthal box designs (4 filters, 1 fan) clean the air at a faster rate, but are costlier, noisier, and take up more space.

1x1



2x1

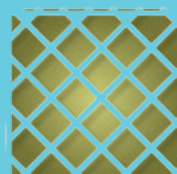


4x1



Replacing your filter

Filters should typically be replaced every 3-6 months, but watch out for these signs that your filter needs to be replaced.



Filter Discolouration



If airflow from your air cleaner has decreased



If dirt and dust is visible on the filter