

HOW TO BUILD A CORSI-ROSENTHAL BOX

The Corsi-Rosenthal Box is an affordable DIY air-cleaning system made with simple materials found in hardware stores. The box fan pulls air through the filters on the sides and blows out clean air. It is proven to reduce indoor exposure to airborne particles, including those containing the virus that causes COVID-19. The box can also decrease the levels of other particles in the air, such as dust or wildfire smoke.

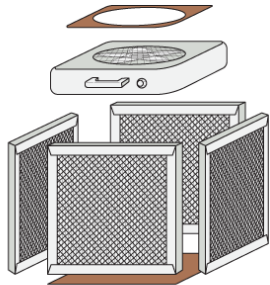
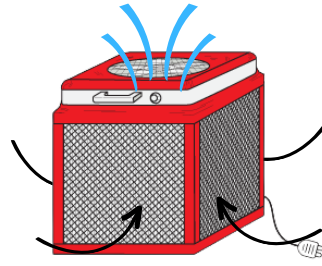
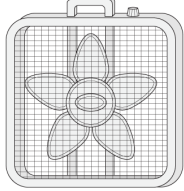
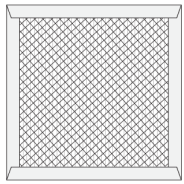


Illustration by Amanda Hu



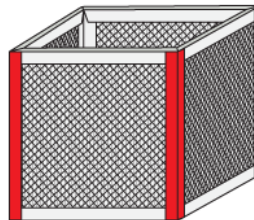
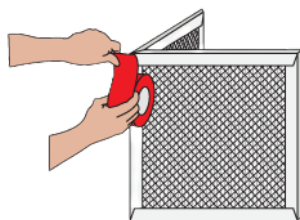
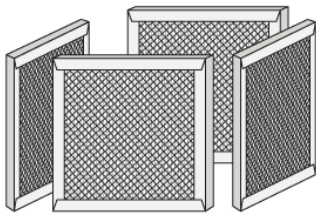
THE MATERIALS

- Filters can last up to a year
- Keep away from walls and corners

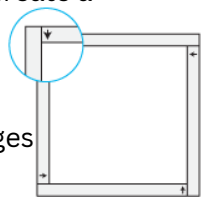


THE CUBE

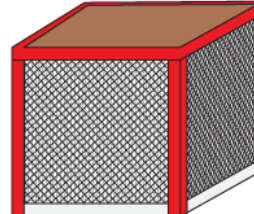
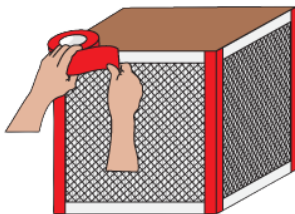
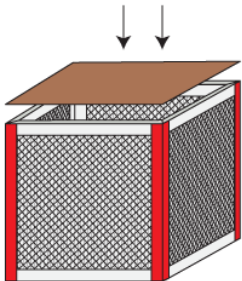
- 4 Filters: 3M MPR 1900 (20" x 20" x 1" or 20" x 25" x 1") or MERV 13 (20" x 20" x 2" or 20" x 20" x 1" or 20" x 25" x 2" or 20" x 25" x 1" [2-inch preferred])
- Lasko or Mainstays 20-inch Box Fan
- Scissors, Utility Knife, Duct Tape



- Arrange the filters to create a symmetrical structure
- Ensure the arrows are pointing inwards
- Duct tape the four edges
- Vertical orientation of the pleats is preferred

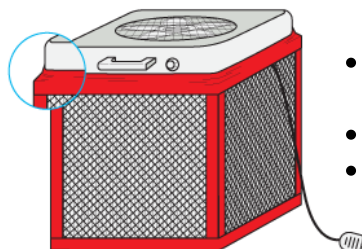
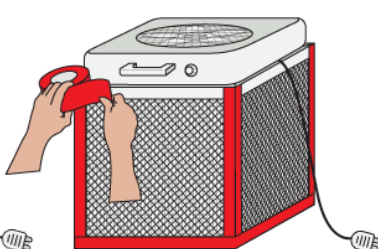
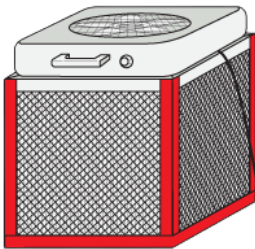


THE BASE



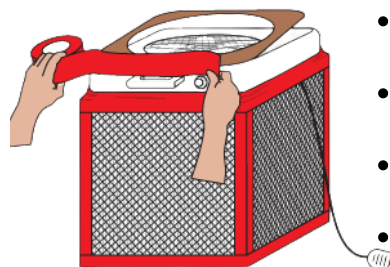
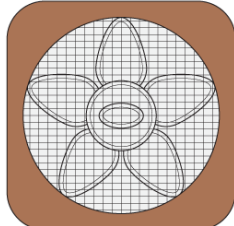
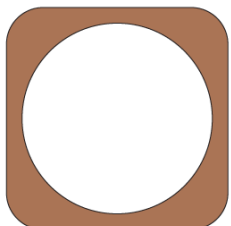
- Use one side of the fan's cardboard box
- Cut the cardboard to fit the base of the cube
- Duct tape it on all four sides

THE FAN



- Place the fan on top of the cube (air must blow upward)
- Seal all sides, including corners
- Ensure any holes on the side of the fan are sealed off with duct tape

THE SHROUD



- Cut the other cardboard sheet to fit the top of the fan
- Cut a circular hole (Diameter: 15" for Lasko and 16" for Mainstays)
- Place the shroud on the fan and tape it on all four sides
- The shroud increases efficiency and decreases the noise level