

Cleaning the air at work



To reduce transmission of airborne Covid/ pathogens, exposure to all toxic substances at work, cut sickness absence and make work healthier!

- Good Ventilation** – Minimum 10 litres per sec per person; 6 Air Changes per Hour to dilute, disperse, remove stale air +respiratory aerosols containing Covid
- Added Filtration** - HEPA or DIY Corsi-Rosenthal Box to remove Covid aerosols + other microscopic particles – pollutants, allergens + some VOCs
- Monitoring** – Keep CO2 below 800ppm; Keep PM 2.5 as low as possible
- FFP2/3 respirator - Mask** - To remove Covid + other pathogens/pollutant particles from the air you exhale or inhale

Latest UK version of DIY Corsi-Rosenthal Box <https://drive.google.com/file/d/1WPrJBBD9uItDzv0jI0uP3OXIWR5Y7ghQ/view> <https://www.youtube.com/watch?v=3gEDgo9pSXY> Ruth Booker 'Whole Family Productions' video <https://twitter.com/i/status/1672224128802193408>

Clean Air Classrooms A #CleanAir STEM PROJECT

HOW TO BUILD A UK DIY Air Cleaning Device #CorsiRosenthalBox

VIDEO INSTRUCTIONS By Children Underway Stay tuned

Resources For the Air Cleaner

- Fan: Vent Axia Box Fan 14 inch
- Filter Panels: 4 x 3M Filtrete MPF1900 – 20 x 25 x 1 inches
- Box Lid, Bottom & Legs: Corrugated Cardboard, Re use the packaging
- Tape: Gaffa/Duct Tape
- Tools: Cutting blade & board, ruler, pencil, paper ,butterfly pin, screwdriver

Step 1: Preparation- box lid & bottom

Step 2: Preparation- box legs

Resources For Protective Enclosure

- Perforated Board: 4 x Ikea 'Skadis' Peg Boards 76cm x 56cm (re use corrugated strips for box legs)
- PVC coated wire: Garden wire Or Kitchen Freezer bag ties

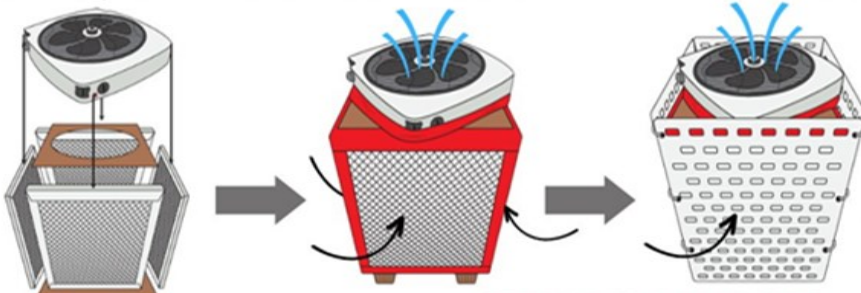
This will be demonstrated on Hazards Campaign stall during conference.
 Cleaning the Air at Work Latest Hazards Campaign
 Update: <https://tinyurl.com/432jztzw> QR Code >>>



Contact us for more info, support and to let us know what you are doing on 'Cleaning the air at work'
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HOW TO BUILD A CORSI-ROSENTHAL BOX

The Corsi-Rosenthal Box is an affordable air-cleaning system made with simple materials. The fan pulls air through the filters on the sides and blows out clean air. It's proven to reduce exposure to airborne particles, including those containing the virus that causes COVID-19. The box also reduces the levels of other particulate pollutants and allergens. The UK version was adapted & tested by Stefan Stojanovic. This sheet is only intended to be a simple assembly guide. More detailed information is available in our other literature.



Adapted from an illustration by Michelle Wong

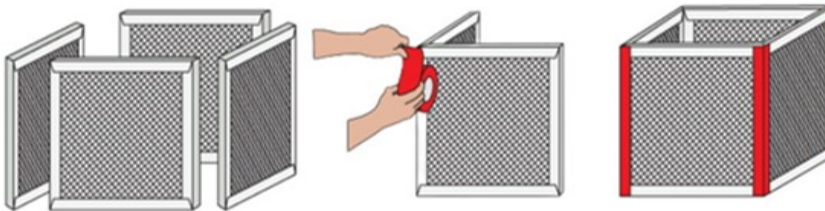
STEP 1: THE MATERIALS

- Filters can last up to a year used in a typical UK classroom/school hours.
- Keep away from walls and corners
- Fan should blow air upward



STEP 2: THE CUBE

- 4 filters: 3M MPR 1900 (20" x 25" x 1" or 20" x 20" x 1")
- Vent-Axia 14-inch Box Fan
- Scissors, Utility Knife, Duct Tape
- Screwdriver (preferably electric)
- Ruler and Pen
- Materials for protective enclosure:
 - 4 Ikea SKÅDIS pegboards 76x56 cm
 - PVC coated wire



STEP 3: THE BASE + SHROUD

- 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



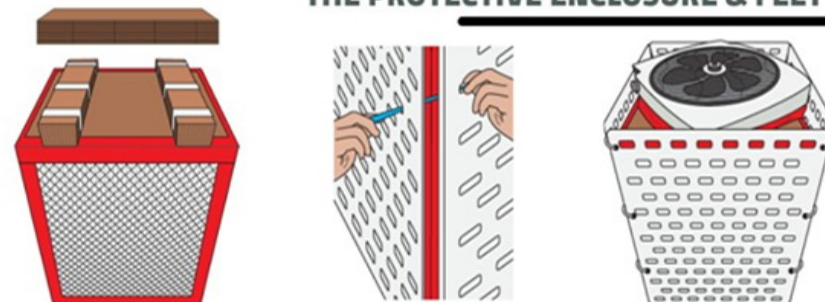
STEP 4: THE FAN

- Cut both sides of the fan's cardboard box to a size of 21" x 21"
- Tape one side to the base
- Check step 5 for optional protective enclosure and feet
- Using a 20cm paper strip pinned at the centre, mark dots 1 cm apart on the other piece. Cut along the dots.
- Use two streets for extra strength
- Turn the box over and tape the shroud



- Unscrew the plastic base of the fan (electric screwdriver recommended)
- Pop off black caps and unscrew side circular component
- Position the box fan on top of circular aperture (45 degree placement)
- Ensure the corners of the fan are placed on the centre of filter panels
- The cord is fully taped to shroud and down the vertical corner
- Ensure all gaps are fully taped & sealed

THE PROTECTIVE ENCLOSURE & FEET (OPTIONAL)



- After step 3: Tape 5 sheets of the Ikea packaging at ends and middle to form two legs with a height of 10cm each
- Securely tape legs to the base
- After step 4: Using PVC wire attach two perforated panels in front of the CR box
- Fasten ties loosely at first, allowing some tolerance for best fit
- Position CR box into place and then attach the final panel