

# DIY AIR FILTER

An affordable way to improve indoor air quality

## Materials:

- Four 20x20 MERV 13 filters
- One 20-inch box fan
- Two pieces of cardboard and duct tape

Clean air flows out at the top of the fan

Dirty air flows in through all four filters



## Understanding Filter MERV Ratings

- Dust, Lint, Pollen
- Dust mites, Mold spores
- Smoke, Pet Danger, Cough Particles
- Bacteria and Virus Particles

MERV 6

MERV 8

MERV 11

MERV 13

Filters 85% of PM 2.5

The higher the MERV rating the better the filter is at trapping certain particles

## Tips for Use:

Don't put near open windows

A few feet away from walls

Keep pets and children away from filter

Replace every



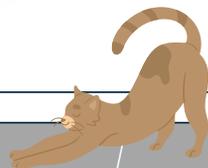
If possible remove filters outdoors

Wear gloves and wash hands afterwards

Mask

Carefully remove filters to prevent the release of harmful particles

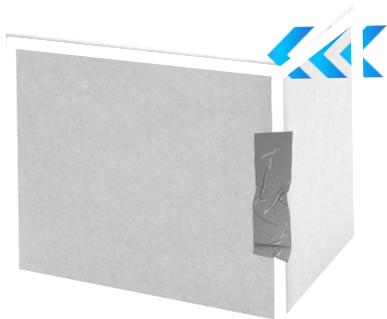
Place old filters in trash bags



# How to Build a DIY Air Filter:

## Step 1

Duct tape the four filters at a 90° angle

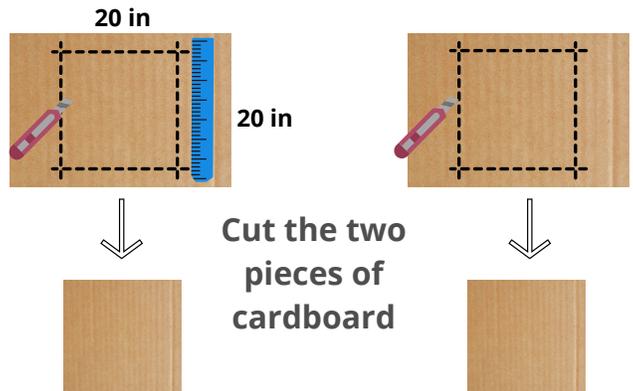


Make sure air flow arrows are pointed in

Tape on the cardboard edges of the filter

## Step 2

Measure base of the four filters



Cut the two pieces of cardboard

## Step 3

Tape cardboard cutout on the bottom of the filters



Don't tape the top of the filter just yet!

## Step 4

Tape fan onto the top of filters

The fan should be facing up towards the ceiling

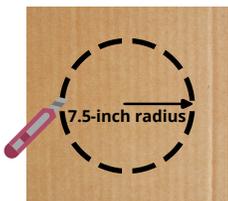


Make sure the fan's plug is out and that you're able to change the setting on the fan

Higher fan speeds will clean air quicker

## Step 5

Cut a circle onto the other piece of cardboard and tape it on the top of the fan



Cardboard cut out will reduce back flow and increase efficiency

## Step 6

Make sure there are no gaps, if there are cover them with duct tape. Make sure not to tape over the filter.



Fan should be facing the ceiling and blowing the clean air up