



# Knowing When To Change Your Filters

One of the most common questions we get asked is “how often will I need to change my filters?” It is important to change the filters when required to maintain optimal performance.

## INOVAIR® AIR PURIFIERS CONSIST OF 3 MAIN FILTER STAGES

### Stage 1: Pre-filter

On average the pre-filter is designed to last up to 6 months of continuous use. Dust levels in the ambient air will affect how long the pre-filter will last. Like a vacuum cleaner bag it is impossible to predict the exact lifespan because that comes down to how it is used.

The Pre-filter is the initial stage of filtration, it filters large dust particles right down to ultra fine sub micron particles. It is made from a patented high-efficiency material used in high efficiency respirators and face masks. They provide high efficiency filtration at approximately 70% down to  $.3 \mu\text{m}$  - this is extremely efficient for an initial stage of filtration and is why the HEPA filter will last up to 5 years.

Pre-filters are white in colour and will turn grey fairly quickly within 1-2 weeks of use -this is nothing to be concerned about and simply means the filter is doing its job. After months of use a dust layer will build up on the exterior of the pre-filter. We recommend checking the dust buildup on the pre-filter every 3 months of use. When the dust layer is approximately 2 mm thick the filter should be replaced.

### Stage 2: Medical-grade HEPA filter

The H13 HEPA filter is designed to last 3 to 5 years under normal use. Like with other filters the environment in which it is used will determine the filter life.

The outside of the HEPA filter will change colour and turn grey when it needs changing. Generally for the first two years of use the filter will remain white and then gradually get darker in the final months of its life.

Note: the inside of the HEPA filter will always remain white so it is important to check the outside of the filter which is visible when the pre-filter is being changed.

### Stage 3: Final stage activated carbon filter

The E7 impregnated carbon wrap around filter is designed for light duty use and will last approx. 6-12 months -this filter is used on the AirClean E7 model only as this system is primary designed for dust & allergen removal.

All other models utilise granular activated carbon (GAC) filters with kilograms of carbon with a life of 3-5 years depending on use.

Activated carbon filters work by adsorbing chemicals, gases and odours from the air and the more activated carbon in the filter the better it will purify the air due to a larger surface area, it will also last longer. For example: a 6 kg activated carbon filter will last 3 times as long as a 2 kg filter and remove 3 times the amount of pollutants from the air during its life. Activated carbon filters are like large sponges which have an extraordinary large surface area.

Carbon filters should be changed when they are saturated, this means the filter has entirely filled up with whatever it has filtered from the air during use. You can tell when a carbon filter needs changing because the air coming out of the air purifier will either be tainted with an odour of what it has adsorbed during use, or the air will simply stop smelling clean or smell stale.

Air which is purified through a carbon filter has a very distinct clean smell which is void of all odours, except for a slight sweet smell from the activated carbon itself, most people describe the carbon as having a “fresh smell”.