

## IQAir NanoMax: Ultra-high performance HVAC filtration

IQAir NanoMax is a new generation of ultra-high performance filtration for residential heating, ventilation, and air conditioning (HVAC) systems. NanoMax reduces fine and ultrafine particles by up to 95%, including viruses, bacteria, allergens, and harmful traffic pollutants. NanoMax eliminates the need for costly upgrades to your home's HVAC system associated with HEPA filters. NanoMax filters require no pre-filters, fit into standard 2" filter slots, and have pressure drops fully compatible with standard home HVAC systems.

### Transform HVAC into an ultra-efficient filtration system

#### A new generation of air filters

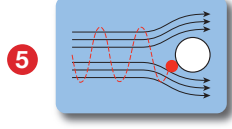
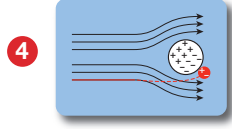
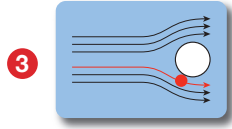
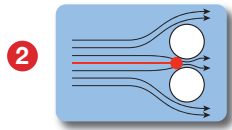
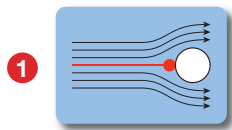
NanoMax meets HVAC system needs with a standardized size (2" slots), minimal pressure drop (initial: 0.18 in H<sub>2</sub>O, final: 1.40 in H<sub>2</sub>O), and minimal static pressure buildup to preserve your HVAC system components without excessive noise or system failures. The filtration efficiency and ultra-low pressure drop is second to none. NanoMax filter media is housed in a biodegradable, environmentally friendly casing that's easy to recycle during replacement.

#### NanoMax filters have real benefits

Notwithstanding their superior efficiency, NanoMax filters do not significantly reduce airflow. Typical three-month filter-replacement intervals can be extended to 6 months after installation of a NanoMax filter, resulting in substantial savings. Unlike conventional commercial HEPA filters, NanoMax filters require little or no alteration to existing HVAC systems. Furthermore, lower health care costs have been associated with improved air quality, adding to the potential financial benefits of NanoMax filters.



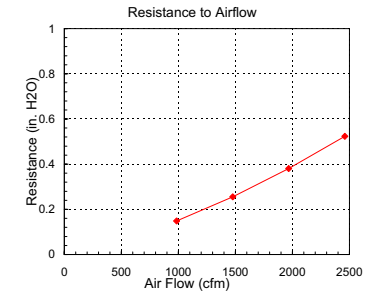
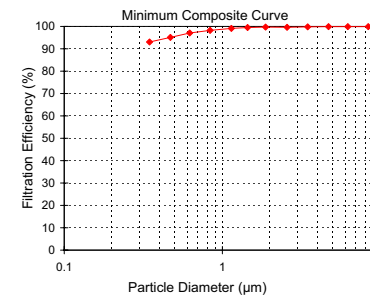
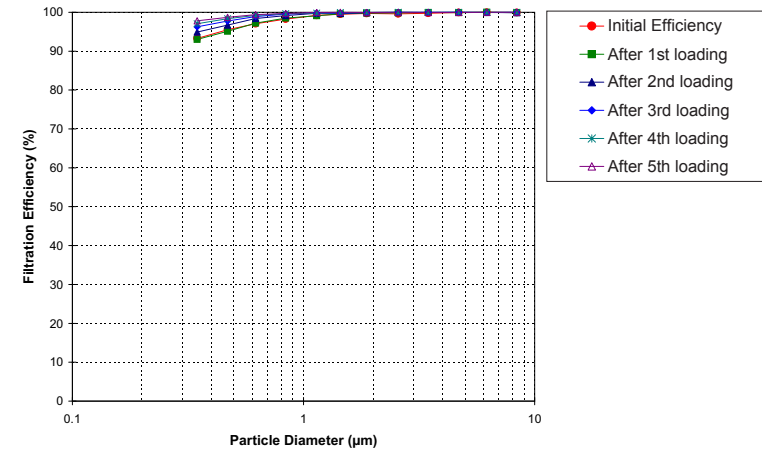
# IQAir® NanoMax™ Series: Ultra-high performance air filtration



## Why is the NanoMax so effective?

Conventional HVAC filters rely on only two or three filtration effects, but the NanoMax filter optimizes five different filtration effects. This combines maximum air cleaning efficiency with minimal air resistance.

- 1. Straining Effect.** This effect captures very large particles that are simply too large to fit in between filter fibers. Capture Range: Larger than 100 microns
- 2. Impingement Effect.** Larger particles collide with fibers, becoming attached. This includes mold spores and pollen. Capture Range: Larger than 10 microns
- 3. Interception Effect.** Smaller particles are captured as they come within half a particle diameter of the fiber. Capture Range: Smaller than 10 microns
- 4. Electrostatic Attraction.** The electrostatic charges of fibers help attract and capture smaller particles. Capture Range: Smaller than 10 microns
- 5. Diffusion.** Very small particles (ultrafine particles) are bounced around by air, eventually colliding with filter fibers. Capture Range: Smaller than 0.1 microns



Average in-classroom particle reduction in California school air filtration study.  
(Pilot Study on High-Performance Air Filtration in Classrooms Applications, AQMD 2009)

## Advanced features of IQAir NanoMax

**HyperHEPA® Pleat Design:** Advanced HyperHEPA pleat-spacing technology allows a filtration surface area of over 60 square feet. This is 5 times more than a conventional pleated filter. The result is increased airflow and better filter loading, which widens replacement intervals and reduces costs.

**WedgeSeal™:** Most HVAC filters allow up to 30% of the air to bypass the filter, dramatically lowering overall efficiency. NanoMax filters feature a unique, IQAir-designed, wedge-shaped seal that increases overall efficiency by ensuring that all the air in the airstream is filtered.

For more information, visit [www.iqair.com](http://www.iqair.com) or contact IQAir at 888-240-7016.