

Elevator Air Purification System

EU-100X

SecureAire's EU-100X is an Elevator Air Purification System that utilizes ACTIVE Particle Control Technology (APC). ACTIVE Particle Control is the most advanced and optimized Electronically Enhanced Air Purification system available in today's marketplace.



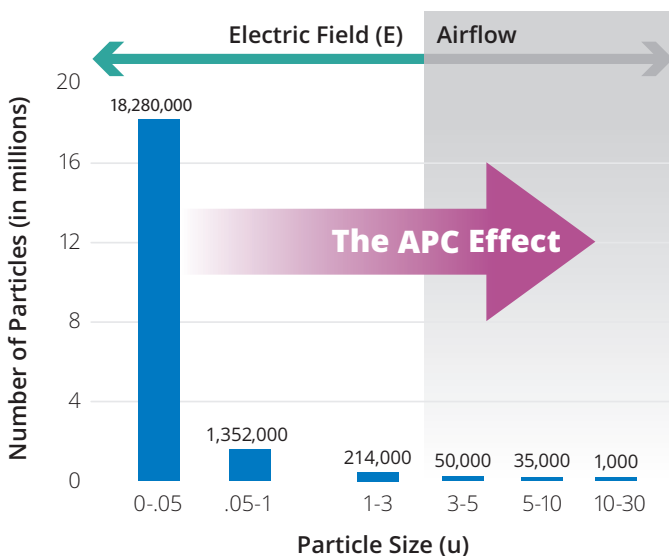
SecureAire's ACTIVE Particle Control Technology utilizes semiconductor airborne contamination reduction technologies to increase the efficiency and effectiveness of SecureAire's proprietary filtration media. The System also provides an airborne pathogen inactivation benefit through our INACTIVATE™ Technology. INACTIVATE reduces organisms' ability to grow and provides the necessary voltage strength to oxidize and kill airborne pathogens.

In addition, ACTIVE Particle Control Technology is the only system that actually controls the movement of particles in a space. Particle Control Technology provides the ability to treat all airborne challenges (particles, TVOCs, smoke, and dissolved gases) the same.

Particle Control Technology is the combination of electrostatic and electrodynamic fields, which together combine to make airflow the dominant transport mechanism for airborne particles in any space. It is this combination of Electrical Enhancement that makes SecureAire's System the most advanced system available today.

Inside the EU-100X, you will find a fan, an ACTIVE Particle Control Technology System, a replaceable SecureAire filter cartridge and a variable-speed controller. This is a complete system that can deliver up to 600 CFM of particle-free air. The system is designed to provide airborne pathogen protection for the people that use the elevator. The EU-100X is designed to maximize particle control by optimizing the three components that dictate air purification.

Particle Distribution in Air



These three components are:

- 1. Particle Coagulation:** In order to overcome the dominant electromagnetic transport control mechanism of small particles, Particle Coagulation creates larger particles making airflow the dominant transport mechanism.
- 2. Optimized Air Change Rate:** This brings particles back to the filter for removal or sends them to a dedicated exhaust.
- 3. High Efficiency Filtration:** The utilization of a highly efficient helps in the removal of particles and helps to maintain a safe, healthy and clean elevator environment.

System Technology

SecureAire's **ACTIVE Particle Control Technology** is a complete air purification system that employs a patented 4-step process to create the **Safest, Healthiest and Cleanest Indoor Air Possible**.

STEP 1: CONDITION

As particles in unfiltered air move through the SecureAire system, they are Conditioned. The Conditioner emits equal amounts of positive and negative charges, and as particles pass through, they pick up these charges.

STEP 2: COLLISION

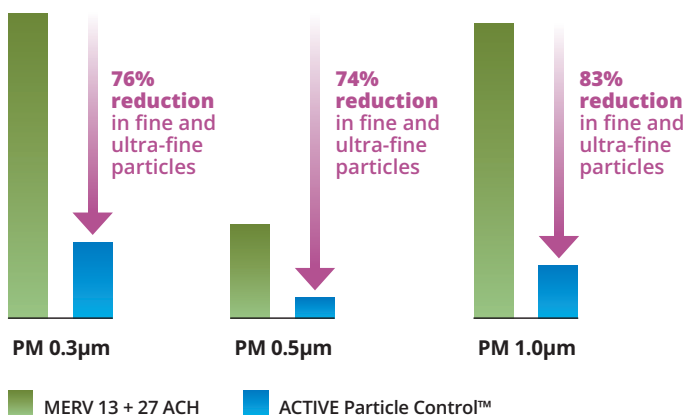
During the Conditioning phase, particles acquire either a positive or negative charge. The Collision step forces them to collide with each other through inelastic collisions creating ionic bonds, one of the strongest bonds in nature. Thousands of times a second, conditioned particles are forced to collide, gaining weight in the process, and becoming neutral in charge.

Due to electrostatic forces, the smallest particles remain suspended in air and are not very susceptible to airflow movement. But SecureAire's Conditioning and Collision process helps to transform small particles/pathogens into larger clusters that now have enough weight to be carried by air currents.

The EU-100X is today's most advanced electrically enhanced Elevator Filtration system.

Sub-Micron Particles and Pathogens*

(Live operating elevator cabin study)



* Third party results submitted for publication.

STEP 3: CAPTURE AND INACTIVATE

Once these larger clusters of particles/pathogens are carried via airflow to the SecureAire Cartridge, they are captured and permanently held on the filter via strong ionic bonds. Within the cartridge, viable pathogens are exposed to an energy field that causes extreme oxidative cellular stress, destroying them and rendering them harmless.

STEP 4: TRANSPORT

Finally, perhaps the most critical aspect of any air purification process is Transport. SecureAire's ACTIVE Particle Control Technology's 4-Step Process is one of the only known air purification technologies to be able to transport small and harmful airborne pathogens from a treated space.

The 4-Step process never stops.

The smallest particles that escape capture are again electrically conditioned and propelled back into the treated space to further collect pathogens, TVOCs, gases, odors, bacteria, viruses, and other harmful airborne particles.

System Specifications

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| Filtration Efficiency Rating | MERV 15 per ASHRAE 52.2 standard test |
| Air Flow Range | Up to 600 CFM |
| Power Supply | 120 Single Phase VAC |
| Safety Current Protection | SB 1.0 A/125V fuses |
| Humidity Range | <95% Non-Condensing RH |
| Safety Interlocks | The filter replacement panel safety switch turns the system off to accommodate a filter change. |
| Dimensions/Weight | Height: 16.25" Width: 12" Depth: 12.25" Weight: 21 pounds |
| Noise Level | 45-50 dB |

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