

## OPERATION & MAINTENANCE BASICS



### Congratulations...

On purchasing CosaTron, the leading technology for controlling indoor air contamination and the problems it causes. Over 98% of the contaminants in a typical atmospheric sample are below one micron in size — hundreds of times smaller than a human hair. Relatively few of these submicron contaminants are captured by typical air handling filters. These submicron contaminants tend to remain suspended in the air, driven by the electrical lines of force to plate out on equipment, people and surfaces such as the ceiling, walls, furniture and light fixtures.

The patented CosaTron Contamination Control System helps control these submicron contaminants. CosaTron accelerates the natural process of collision and coagulation. Thus, the particles collide and adhere to each other more rapidly. Then, the air currents sweep these larger particles to the returns where they can be removed by the air filters or exhausted instead of plating out.

CosaTron is the answer for controlling airborne particulate and gaseous contaminants where you live, work, play and breathe. Enclosed you will find the necessary material to help you understand and maintain your CosaTron System.

The CosaTron Contamination Control System is designed to treat all of the air in the room being conditioned.

The following procedure should be followed to ensure maximum effectiveness.

1. The ventilation system should be run 24 hours a day when feasible. In humid climates, it is preferable to allow the CosaTron power generator to run continuously to prevent moisture from affecting the solid state components. Note: Since the largest generator draws less than 50 watts, the cost to run the system is negligible.
2. On systems that only operate during occupancy, the system should be operated at least one to two hours prior to, through one hour after, the conditioned space is scheduled for use. This includes all occupancy (i.e., staff members, housekeeping crews, kitchen staff, etc.). This time should be extended to two hours after operating hours in smoke control applications.

3. Due to the operation and improved ventilation effectiveness of the CosaTron system, the air filters will experience a more rapid loading of contaminants. The filters should be changed before they restrict air flow decreasing the effectiveness of the ventilation system. Filters should never exceed the manufacturer's recommended pressure drop before changing.

4. Each time the air filters are changed, the CosaTron System should be visually inspected and/or tested per the appropriate operation and maintenance procedure.

PLEASE READ THIS MANUAL THOROUGHLY BEFORE ATTEMPTING MAINTENANCE.

**For more information**

[www.cosatron.com/start-up/](http://www.cosatron.com/start-up/)



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