The Art Institute of Chicago

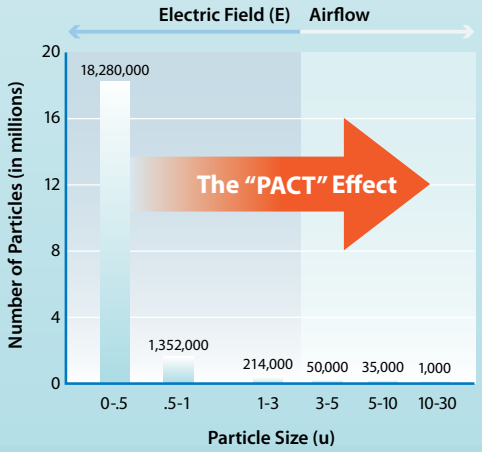
The Art Institute of Chicago was founded in 1879 and welcomes nearly 1.5 million visitors from around the world during any calendar year. The Institute houses over 300,000 works of art, its permanent collection, and shows other prominent collections during various times throughout the year. All of the collections are housed and shown within its 8 buildings, which encompass nearly 1 million square feet. The Art Institute of Chicago is the second largest museum in the United States and is located in the heart of Chicago just one block from Lake Michigan.

In early 2010, the Art Institute became concerned about the Indoor Air Quality that surrounded one of its "Miniature" model collections being displayed in its Thorne Room. The Institute was concerned with the preservation of this collection as some type of odor (potentially VOCs) and dust particles had been present in the room. The Institute quickly contacted its engineering partner, McGuire Engineers of Chicago (MEPC) to help identify, assess and resolve the situation.

Having previous experience with solving Indoor Air Quality issues, MEPC in turn contacted Energy Improvement Products (EIP), whom is the local representative for SecureAire. EIP quickly responded by proposing an interim but immediate solution with SecureAire's Portable APS-1000 PACT System. The APS-1000 utilizes SecureAire's PACT Technology and can be deployed immediately with a simple wall outlet for power.

SecureAire's PACT or Particle Accelerated Collision Technology is the Industry's only Particle Control Technology for the improvement of Indoor Air Quality. This unique system utilizes semiconductor airborne contamination reduction technologies to increase the efficiency and effectiveness of all air filtration systems. "PACT" is the only system that makes airflow the dominant transport mechanism and controls the behavior of fine particulates by creating inelastic collisions between particles on a sub-micron level. These collisions cause smaller particles to combine and form larger

Particle Size Distribution in Air



particles. This process significantly improves the ability of a standard filtration system to remove and reduce suspect indoor and outdoor generated contaminate levels.

Within a few hours of being deployed in the Thorne Room, the SecureAire APS-1000 System had successfully mitigated all of the odors. While this reduction happened extremely quickly, it was also noticed that the APS-1000 unit showed an appreciable reduction in the amount of dust particles in the room. This experience led to the design and installation of a complete SecureAire PACT System for the Thorne Room.

In addition to the noticeable performance of the SecureAire PACT System, EIP also employed SecureAire's Air Quality Monitor, the AQM-100 to further document and verify the PACT system performance. The AQM-100 provides the ability to perform a "first party" test with a simple and easily transcribed data stream at 0.4 and 2.5 micron particle sizes. This sensitivity helps to characterize potential indoor air contamination in real time intervals of less than a minute.

SecureAire PACT Systems have also been employed in the Art Institute's Rice Building where the reduction of CO, CO_2 and diesel fume emissions are being achieved. This was a concern of the Institute due to the proximity of the building and its outside air intakes to the railways and public road systems. Additional projects within the Institute continue to be designed and constructed in a phased in manner.

As a direct result of utilizing the SecureAire PACT System, The Art Institute of Chicago has successfully reduced the amount of odors (VOCs), CO, CO_2, diesel fume emissions and dust particles within specific areas of the Museum. These areas have also noticed significant reductions in mold and particles on the cooling coils of the supplying Air Handling Units. This aspect will continue to be monitored and studied by the Institute.

The Institute takes pride in employing Indoor Air Quality solutions for the protection of the arts and visiting patrons.

For more information about the application of SecureAire Products at The Art Institute of Chicago, please feel free to contact SecureAire, McGuire Engineers or Energy Improvement Products.

McGuire Engineers (MEPC): Mike Murphy, 312-876-9240
Energy Improvement Products (EIP): Jim Karambelas, 847-885-3615

"SecureAire's PACT System has the unique ability to remove many different contaminants from Indoor Air as verified by the Art Institute."

Jim Karambelas,
President
Energy Improvement Products

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