

# Dollars? Do you have an IAQ Investment?

American Standard Catalytic Air Cleaning System  
and Genesis Air PCO panels  
Affordable Building Occupant Protection

- Historical use of filters – protection for HVAC system
- Valuable assets in buildings

**How many roof top units are you planning to replace in the near future?**

What are the dollars for filters that are spent that primarily protect the HVAC equipment?



Norman OK Police Station

Refrigerant R-22 is being phased out due to its ozone depletion characteristics. As of January 1, 2010, R-22 will only be available to service existing R-22 equipment.

**Many classrooms are not adequately ventilated.**

Ventilation rates have rarely been measured in schools, although **inadequate ventilation** is often suspected to be an important condition leading to reported health symptoms.<sup>1</sup>



St Luke's Vintage Hospital  
Houston, Texas

1. **Indoor Air Quality, Ventilation and Health Symptoms in Schools: An Analysis of Existing Information.** Joan M. Da-isey1, S. William J. Angell2 and Michael G. Apte1, LBNL-48287.  
2. **EPA, Design Tools for Schools, High Performance Schools.** <http://epa.gov/iaq/schooldesign/highperformance.html> (2009)

4. Hodgson, M.M.D., MPH VA, ASHRAE, **Position Document on Airborne Infectious Diseases**, June 24, 2009  
5. Stolz, A.D., A. Knickelbein, and S. Coburn. 2008. "Linking coordinated school health to student success." Presentation at the Annual Conference of the National Association of School Nurses, Albuquerque, NM.  
6. Vinciullo, F. 2008. "The relationship between multi-component school health programs and school achievement." Presentation at the Annual Conference of the National Association of School Nurses, Albuquerque, NM.

**What is the cost to fund people protection?**

Evidence continues to mount demonstrating that indoor air quality, or IAQ, directly impacts student academic performance and health.<sup>5,6</sup>



Norman OK Public Library



*"The Classroom is the most important area of the school because it is where students and teachers spend most of their time and where the learning process takes place."*

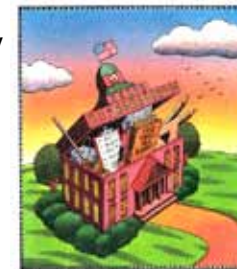
Help schools maintain a healthy environment in school buildings by identifying, correcting, and preventing IAQ problems. Poor indoor air quality can impact the comfort and health of students and staff, which, in turn, can affect concentration, attendance, and student performance.<sup>2</sup>

## Benefits of a High Performance School

1. Higher Test Scores<sup>2</sup>
2. Increased Averaged Daily Attendance<sup>2</sup>
3. Reduce Operating Costs<sup>2</sup>
4. Increased Teacher Satisfaction and Retention.<sup>2</sup>
5. Reduced Liability Exposure<sup>2</sup>

EPA

### Indoor Air Quality



Tools For Schools

"Assume a 500-Student elementary school invests \$4.00 per sq ft on high performance lighting and air-conditioning improvements that will improve the IAQ. Based on a \$4,000 revenue limit, an increase of Average Daily Attendance of 1.75% would **pay back** all of the investments in only two years."<sup>2</sup>

**"When outbreaks occur in the workplace HVAC systems have to be considered" <sup>4</sup>**

Based on research findings and on ASHRAE's position, it seems prudent for infection-control professionals and building designers to consider additional control measures for airborne transmission, **in addition** to the precautions already in use when designing new healthcare facilities and updating existing facilities.<sup>4</sup>

# Installations

## Schools

Bellevue, Elementary, Bellevue, Nebraska  
Browning Elementary, Houston, Texas  
LCISD George Jr. High, Houston, Texas  
Alamance Career & Tech Edu Ctr, Greensboro, NC  
Grand Blanc ISD, Grand Blanc, Michigan  
Montour High School, Pittsburgh, Pennsylvania  
Katy ISD, Katy, Texas  
Lubbock ISD, Lubbock, Texas  
New Deal ISD, New Deal, Texas  
Trinity Prep, Dallas, Texas  
TTU McNair Scholars, Lubbock, Texas  
Whiteface ISD, Whiteface, Texas  
Pep Alternative School, Pep, Texas  
Williston State College, Williston, North Dakota  
Louisiana State College (LSU), Baton Rouge LA

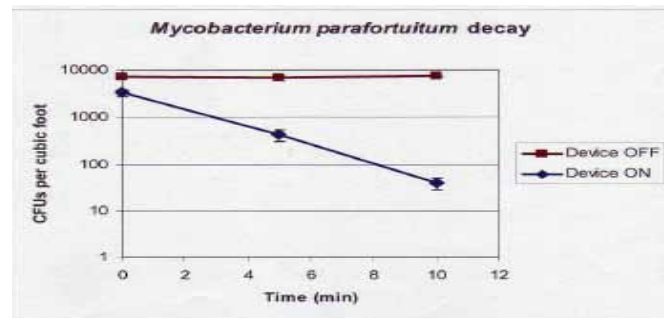
## Hospitals Labs & Cleanrooms

Wright-Patterson AFB, Building 5 M-30, Wright Patterson, Ohio  
Arkansas Children's Hospital, Little Rock, Arkansas  
St. Luke's Vintage Hospital, Houston, Texas  
Forbes Regional Hospital ER, Pittsburgh, Pennsylvania  
Analytical Food Labs, Grand Prairie, Texas  
Big Spring VA, Big Spring, Texas  
Grand Junction VA, Grand Junction, Colorado  
Koch Cordis Class 100 Cleanroom, Juarez, Mexico  
Integrated Cancer Center, El Paso, Texas  
Lubbock County Medical Examiner's Office, Lubbock, Texas  
Portsmouth Regional Hospital, Portsmouth, New Hampshire  
Mid Michigan Medical Center, Midland, Michigan  
NE Alabama Medical Center, Anniston, Alabama  
St. Joseph Mercy, Oakland, Michigan  
TTUHSC, Lubbock, Texas  
TTUHSC, El Paso, Texas  
U of LH Pharmacy Clean Room Class 1000, Louisville, Kentucky  
Conroe Regional Hospital, Conroe, Texas  
Lahey Clinic, Boston, Massachusetts  
Citizens Medical Center, Wichita, Kansas  
Terrebonne General Medical Center (TGMC) Houma LA  
Cypress Fairbanks Medical Center Houston, Texas  
Stamford Bennett Cancer Center Stamford, Connecticut  
Mid Michigan Hospital, Midland, Michigan  
Gothenburg Memorial Hospital, Gothenburg, Nebraska  
Round Rock Hospital, Round Rock, Texas  
St Joseph Hospital, Tampa, Florida  
Scott & White Hospital Temple, Texas  
New Albany Medical Center, Columbus, Ohio  
Fort Smith Health Care Center, Yellow Knife, NT Canada  
Gunderson Lutheran Hospital, LaCross, Wisconsin  
Tenet Hilton Head Hospital, Hilton Head, South Carolina  
Hancock Health Center, Round Rock, Texas  
Ruby Hospital, Morgantown, West Virginia  
John Muir Hospital, Oakland, California  
Baylor Medical Invetro Clinic, Dallas, Texas



George Bush Presidential Library

Third Party Testing available  
thru your local  
American Standard  
Territory Manager



*Mycobacterium parafortuitum decay (TB Simulate)*  
Test Data Courtesy of RTI (2006)

**“As designed and tested the Genesis Air system was able to remove or neutralize better than 98% of the airborne material as it processed the test chamber.”**

Dugway Proving Grounds Western Desert Test Center (2006). *WDTC-TR-06-078,3.8,33.*



Bellevue Elementry  
Bellevue, Nebraska

For more information contact  
your local  
American Standard  
Territory Manager