

2nd Qtr. April - June 2002



Mold and mildew is one of a number of indoor air quality hazards that can create health problems in homes, offices, commercial buildings and schools. The health effects can range from mild to serious depending on the mold source and progression. Environmental Protection Agency studies rank mold and mildew as an important environmental health problem.

Molds produce tiny spores to reproduce. Mold spores waft through the indoor and outdoor air continually. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. There are molds that can grow on wood, paper, carpet, and foods. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.

Surprisingly, 50% of all buildings contain problem molds. A new study attributes nearly 100% of chronic sinus infections to mold infiltration. A 300% increase in the asthma rate over the past 20 years has been directly linked to molds. Part of the problem is that buildings are far "less breathable" today than ever before. In our quest for more and more energy efficiency, we have tightened up structures to a point where nature can no longer combat the effects and ramifications of moisture. The three primary sources of excess moisture have been documented as: building structure leaks, plumbing and HVAC system problems and all-important vapor entrapment. Your best line of defense against mold and mildew is prevention. Frequent inspection tours, quick repair of leaking pipes and overall ventilation improvements go a long way in limiting your exposure. At the first sign of mold and mildew, most building operators move quickly to clean up the exposed "evidence". Those telltale black markings and distinct odor are quickly removed by aggressive surface cleaning, however that's just the beginning of an effective response to the problem

Stopping the source of the moisture is the primary goal here. Water from a leaking roof is fairly easy to spot. More difficult is the water infiltration that occurs from flashing and caulking failures. This problem is made even more difficult with the newer seamless faux stucco systems. Awareness, improved maintenance and a keen eye are usually your best tools.

Piping system leaks are easy when they are exposed, however pay sharp attention to those that may occur within walls and floors. These leaks may not be apparent until it's too late. Condensation from non-insulated piping and/or air conditioning ducting can also add to a mold and mildew problem. Never overlook insufficient ventilation as a major contributor. More structural damage has been attributed to ventilation problems than any other single source. Keep in mind, moisture in and of itself is not a problem, but if moisture remains over 72 hours, it naturally becomes a breeding ground for mold and mildew.

If you have a mold problem, take quick action to eliminate the moisture, clean and disinfect all hard surfaces, then remove and replace all porous materials. Use of specially treated air filter media used in HVAC systems can also provide some degree of control.



The total number of injuries sustained as a result of boiler and unfired pressure vessel incidents increased dramatically last year, according to the 2001 National Board Incident Report released by the

National Board of Boiler and Pressure Vessel Inspectors (Columbus, OH). A comparison of the 2001 report with the year 2000 report indicates a 211% increase in the total number of injuries suffered, from 27 in 2000 to 84 in 2001. More than 90% of 2001's reported injuries were directly attributable to human error (i.e., operator error or poor maintenance, low-water condition, improper repair, improper installation, and faulty design or fabrication). The National Board also reports a 17% decrease in the total number of boiler and pressure vessel incidents, with 2,219 in 2001 compared to 2,686 in the year 2000. Human error proved to be a factor in 86% of the incidents reported for 2001. There were 14 deaths in 2000 compared to 12 deaths in *posted from Engineering Systems News

If you provide the correct answer to the following word puzzle you could WIN



JUNNER

Unscramble the following letters into the correct name, word or phrase to WIN dinner for two.

WERNROOTDFIN

If more than one correct entry is received, a winner will be selected at random. The answer to the Quotation Quiz from last time was

Aristotle S. Onassis and Henry J. Kaiser

We received eight correct answers! Susan Kehoe - Ridgefield Public Schools

Bill Sapienza - Sapienza & Lessing Architects

Tom Orzech - Nestle Co.

John Ziobro - Spartech Polycast

Lisa Claveloux - Spartech Polycast

Bob Balkun - Belimo Air Controls

Diane Baker - Hines - 225 High Ridge Paul Brady - CT Building Congress



- Facilities 203 Conference and EXPO June 4th & 5th, Arena @ Harbor Yard, Bridgeport CT
- Connecticut Building Congress Annual Outing June 6th – "Mountainside" – Wallingford, CT
- International Electrical Expo & Conference June 17th - 19th Jacob Javits Center, NYC.
- SACIA Annual Meeting June 17th Sheraton Stamford Hotel, Stamford, CT
- BOMA 95th Annual Convention & Building Show June 23rd -25th MCCormack Place, Chicago, IL

1900: J. C. Whitlam II was the first to formulate and market a ready-to-use thread sealant from red and white pigmented lead and linseed oil.

1910: William E. Sloan (Sloan Valve) issued a patent on his Royal Flush Valve. The first auto shut flush valve.

1903: The Eljer Co. introduced the 1st vitreous china water closet cistern replaced the wall-hung wooden or copper-lined wooden cisterns used to flush a water closet.

1920: McDonnell & Miller manufactured the 1st automatic boiler water feeder to combat boilers being damaged by dry firing

1926: Halsey W. Taylor (Halsey Taylor Fountain) invented the "Bubbler" fountain to provide a fuller and more satisfying sanitary drink.

1927: Kohler's introduction of bathroom sets (bathtub, toilet and lavatory) in matching colors made fixtures much more than functional

1939: Robert Zell (Brass-Craft Mfg) created flexible plumbing supplies from brass bar stock and copper tubing in the basement of his home.

1942: Al Moen, (Moen Faucets) was issued a patent for the singlehandle mixing faucet he invented in 1937.

1949- Metco engineer Ed Ristow, (Milwaukee) invented and sold the 1st Sawzall, nine years before a patent was finally granted

1952: Lloyd Cherne invents pneumatic Test-Ball® Plug using a rubber playground ball from a Woolworth store to come up with a crude test plug.



MECHANICAL CONTRACTORS

4 West Kenosia Avenue Danbury, Connecticut 06810 203-797-8005 - 845-278-8813 fax 203-794-1786

e-mail: mulvaney@mulvaneyinc.com website: mulvaneymechanical.com