



Loss Control Department
Technical Information Paper Series

Prevention of Indoor Air Quality Problems

Copyright © 1997 The Hartford Loss Control Department
TIPS Series S 821.100 Printed in U.S.A.

This document is provided for information purposes only. It is not intended to be a substitute for individual legal counsel or advice on issues discussed within. Readers seeking resolution of specific legal issues or business concerns related to the captioned topic should consult their attorney and/or insurance representative.

Prevention of Indoor Air Quality Problems

Poor indoor air quality (IAQ) can cause a variety of symptoms, such as headaches, eye irritations, respiratory problems, and drowsiness. In extreme cases, these symptoms can lead to excessive absenteeism and loss in productivity, as well as poor morale.

Indoor air quality is affected by a number of variables. These include ventilation, number of building occupants, activities of the occupants, temperature, relative humidity, concentration of carbon dioxide and carbon monoxide (as well as other sources of air contaminants), and microbiological growth. Many indoor air quality problems are preventable through proper design and maintenance of heating, air conditioning, and ventilation systems.

The National Institute of Occupational Safety and Health (NIOSH) Offers these tips for preventing IAQ problems:

1. Inspect all HVAC condensation pans; clean them of visible debris. This should be done without the HVAC running. Sanitize the pan with a solution of 1-5% sodium hydrochlorite, then rinse with clear water.
2. Install a bird screen on some types of rooftop outdoor air intakes in some HVAC units. Ask your unit's installers if you need one. Inspect it monthly.
3. Be sure that all air filters fit tightly in their racks, without gaps. Leaks can cause a significant decrease in filter performance.
4. Inspect all rooftop exhaust fans; they should conform to operational guidelines. Those that do not conform should be repaired or replaced.
5. Check intake air vents to make sure they are not blocked. If exhaust fans are working but air vents are blocked, negative pressure can occur. Significant negative pressure causes imbalances in HVAC systems, which leads to more moist, untempered air, and moisture control problems.
6. Clean accumulated dust on the perimeter fan coil unit-coils, drain pans or fiber glass liners. Replace soiled fiber glass liners.
7. Properly exhaust the building *before* starting up the air conditioning. Warm humid air left after a night or weekend without the HVAC running can condense when mixed with cold air-conditioned air. The added moisture can create a "rain forest effect."

This document is provided for information purposes only. It is not intended to be a substitute for individual legal counsel or advice on issues discussed within. Readers seeking resolution of specific legal issues or business concerns related to the captioned topic should consult their attorney and/or insurance representative.