

Indoor Air Review

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INTERNATIONAL IAQ CONFERENCE IDENTIFIES MOLD AND MOISTURE IN BUILDINGS AS A WORLDWIDE PROBLEM

The Healthy Buildings 2000 conference was held in Espoo Finland August 6-10, 2000. The Healthy Buildings conference series was introduced in 1988 to transfer research results in the field of indoor air quality and climate into practice.

The most recent conference focused particularly on practical solutions for healthier buildings based on scientific data. The main objective of the conference was to give designers,

builders, contractors, building owners and manufacturers recommendations, and practical guidelines. Of the 450 papers presented at the conference the single most important indoor air quality issue of international attention was moisture, mould and other forms of microbial contamination of buildings and mechanical systems.

Conference participants learned that building envelopes and mechanical equipment are plagued by moisture problems at an alarming rate throughout the world. The result has been an epidemic of microbial contamination of buildings and building systems resulting in indoor air quality problems including Building Illness and Sick Building Syndrome symptoms among building occupants.

Asthma and allergies are the most common chronic diseases overall in the developed regions of the world with approximately half the population affected. There has been a rapid increase in such illnesses, often doubling in the past 15 years. In fact, in the US and Japan the illness rates have climbed over 75% in the general population. Mould and moisture problems in buildings are suspected by health researchers to play an important role in the incidence of such illness, and are known to play a major role in exacerbation of asthma.

Coupled with the fact that throughout



the world people spend close to 90% of their lives indoors, mould and moisture problems in buildings play an ever increasingly influential role in human performance as well as health. It was estimated from the available scientific data that in the U.S., improving indoor air quality would result in estimated annual savings and productivity gains of \$6 to \$14 billion from reduced respiratory diseases, \$2 to \$4 billion from reduced allergies and asthma, \$10 to \$30 billion from reduced Sick Building Syndrome symptoms and \$20 to \$160 billion from direct improvements in worker performance that are unrelated to health. In addition Danish researchers reported productivity gains of 2% per worker due to improved IAQ. Much of these savings and productivity gains are achieved by providing the technology and procedures to solve the building related mould and moisture problems.

A Swedish researcher noted that the origins of moisture damage that affects the indoor environment have been caused by different parties in the building process including the architects and designers, building contractors, building owners and operators, building users. In further discussion regulatory authorities were also implicated.

Conference participants learned that for mould related

indoor air quality problems the solution is early detection of moisture before it results in microbial contamination, remediation where contamination is found and implementation of effective cleaning and maintenance practices for surfaces such as carpets and components of the building HVAC systems. Ultimately proper design, construction and operation of new buildings are the solution to avoid mould and moisture problems in the future.

By ELIA M. STERLING
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IAQ SEMINARS

You can learn more about these and other issues at the

Mould & Moisture Conferences

October 4, 2000 at the Coast Capri Hotel, Kelowna, November 1, 2000 at the Victoria Conference Centre, Victoria, BC. ...see reverse



The Association is the single source for a complete range of Indoor Air Quality Services.

They are designed to achieve a balance between cost effective IAQ solutions, and
the well being of occupants within all buildings in British Columbia.

The Association provides proactive IAQ Services, including education, information gathering, documentation and dissemination covering legislation, regulation, and industry standards.

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