

## Experts warn over air health danger

By Matthew Dunckley (H&V News) March 20 2004

Air circulated around many UK buildings is considerably more polluted and harmful to health after going through mechanical ventilation than before, it has been claimed by leading experts.

Delegates at the Chartered Institute of Building Services Engineer's (CIBSE) Indoor Air Quality seminar heard from leading academics that the problem stemmed from an alarming lack of cleaning and maintenance.

They added this put UK workers at risk from Sick Building Syndrome and cost the country millions in lost productivity. "Most of the cases of Sick Building Syndrome in the studies are in mechanical ventilation systems," said Professor Olli Seppanen of the Helsinki University of Technology. "Air handling systems seem to be a major source of sensory air pollution in buildings".

He quoted research showing that every component in the system including ducts, filters and coils seemed to generate pollution if left without maintenance.

Air pollution and poor ventilation could seriously affect worker productivity and lead to an alarming increase in absenteeism, he said.

His view was echoed by EPD principal energy consultant, Robert Cohen, who told H&V News that if systems were to be efficient they needed to be well designed and easily maintained which was not happening in the UK.

"As far as I'm aware clean ducts is not taken anywhere near as seriously in this country as it is in [for example] Scandinavia," Dr Cohen said.

World famous expert, Professor Ole Fanger claimed that air passed through filters could come out more polluted rather than less. He warned of the dangers of not replacing filters frequently and called for continued research into new methods for removing particles from the air.

Commenting on the presentations, Glan Blake Thomas, managing director of air conditioning distributor Advanced Ergonomic Technologies, slammed the level of maintenance in the UK describing it as "scandalous".

Mr Blake Thomas went on to say that maintenance of ductwork was a low priority for building owners and predicted that the problem would worsen in public buildings.

He blasted construction techniques that often resulted in contamination of ductwork from day one.

“No one wants to know until it all falls over,” he said. His views were endorsed by Advanced Engineering director, Andrew Botting, who said some building owners removed filters to increase air flow through ducts.

HVCA’s ventilation hygiene group chairman, Mr Gary Nicholls (M.D. of Swiftclean UK Ltd), told H&V News last week (H&V News, March 13) that building owners were tempted to ignore “out of sight, out of mind” problems associated with ductwork.

Associated of Ductwork Contractors and Allied Services secretary, Alan Weir, pointed to a burgeoning number of ductwork cleaning companies as proof that building owners and facilities managers were taking the issue seriously.

However, he warned that until design, cleaning and maintenance were covered by one et of British Standards, problems such as access to systems would persist.

He also rejected any suggestion of substandard workmanship during construction among ADGAS members, who followed best practice guides for installation

[www.swiftclean.co.uk](http://www.swiftclean.co.uk)