

THE ROLE OF VENTILATION IN MAINTAINING INDOOR AIR QUALITY WITH PARTICULAR REFERENCE TO ENVIRONMENTAL TOBACCO SMOKE – A COMPREHENSIVE REVIEW

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ABSTRACT. *A number of legislative bodies across Europe (Ireland, Scotland Wales England and Norway) have already made or are currently considering (France) making policy decisions on the issue of smoking in public places. These policy alternatives have been discussed in Town & Country Planning. Scientific evidence relating to this debate has been reported in a diverse range of publications such as the British Medical Journal (BMJ), Indoor Air and the Building Services Journal: the magazine of CIBSE (BSJ). On inspection much of this commentary concludes negatively on the performance of ventilation systems. In this paper a critical review is undertaken of some of the more recent and most frequently cited publications. The paper aims to provide insights for policy makers, students in relevant disciplines, facilities and estate managers and those managing buildings with potential for smoker occupancy such as long stay health care premises and those who are interested in this debate.*

Keywords: Ventilation, Environmental tobacco smoke (ETS), Smoking in public places, Indoor air quality (IAQ), Health

1. **Introduction.** Smoking in public places is a hot debate presently in Europe. On one side is the smoker who wants to have a freedom of choice to smoke in public places and building operators who want to accommodate smokers. On the other is the tobacco control movement who believe that restricting places where people can smoke will encourage them to give up. A number of legislative bodies in Europe (Ireland, Scotland Wales, England and Norway) have already made or are currently considering (France) making policy decisions on the issue of smoking in public places. Policy alternatives have been discussed in Town and Country Planning [1].

2. **Smoking in Public Places.** Scientific evidence relating to this debate has been reported in a diverse range of publications such as the BMJ, Indoor Air and the BSJ. On inspection much of this reporting concludes negatively on the performance of ventilation systems [2-7]. Any proposed smoking ban will probably allow a number of exemptions, and it is important that such spaces are ventilated using the best techniques available in order to protect both user groups and staff employed in these buildings. As a result of the negative reporting on ventilation there is a possibility that the potential contribution from