**SCA introduces a revised guide on Smoke Control to Common Escape Routes in Apartment Buildings**

In recent years statistics have shown that the majority of fire related deaths in apartment buildings were caused by smoke inhalation and not through direct exposure to the fire itself. In high-rise buildings, the flow of the heat and smoke from a fire creates an even greater risk for the occupants and the fire fighters. The prevention of smoke spread through buildings and smoke control to common escape routes can be crucial to improve life safety within apartment buildings.

According to the Building Research Establishment (BRE) Fire Conference report, (June 2015) in the period 2009-2013 there were 43,984 fires recorded in apartment blocks, these resulted in 202 deaths and 3,936 injuries.

The high number of fires in apartment blocks outlines the importance of maintaining fire safety at all times. In order to help installers, designers and owners to incorporate fire safety within apartment buildings, the Smoke Control Association (SCA) has released a guide on smoke control to common escape routes in apartment buildings.

The SCA guidance was introduced to give clear information on the design, calculation methods, installation and testing of systems. The aim is to control the spread of the smoke from the apartment on fire into the common escape routes.

The information within this guide highlights methods, recommendations and requirements for the evaluation of conformity for smoke control systems. It also demonstrates testing regimes for smoke control components in accordance with relevant British and European standards.

The guide covers systems intended to protect most common escape routes such as stairwells, corridors and lobbies as well as systems intended to protect fire service access routes. High importance is placed on the staircase, which the majority of occupants will use as a main escape route.

Readers will benefit from the overview of the latest legislation and standards. The publication includes an updated code of conduct to help achieve safe and robust designs. The main changes and updates in Approved Document B of the fire safety consist of: BS 9991:2011 Fire safety in the design, management and use of buildings: BS 7346-8:2013 Components for smoke control systems: Code of practice for planning, design, installation and maintenance.

Professionals will gain insight into different types of ventilation systems and their functions. The report will also indicate the importance of correct procedures to be used for the specific performance of individual manufacturers’ systems. It details the key information on heating, ventilation and air conditioning (hvac) equipment, and its interaction with other fire protection systems.

The publication gives a clear identification of the appropriate usage of fire suppression systems and fire or smoke dampers. This means readers will find detailed information on the fire separating elements in conjunction with other fire protection systems, such as mechanical or manual ventilation. There is also a detailed method for assessing the impact of different types of control systems on common escape routes.

The immense number of fire deaths caused by smoke inhalation, gives a clear message to everyone. It is now more important than ever to design, manage and asses the smoke control systems and the common escape routes within each building. By using the recommendations stated in this document, apartment owners will be able to prevent fire spread in the most common areas of apartment blocks. By doing this they will be protecting residents, fire service personnel and themselves.

To download a free guide, visit: <http://www.feta.co.uk/associations/hevac/specialist-groups/smoke-control-association>