



### **Indoor Air Quality:**

Indoor air is the ambient air inside a building, to which the building's occupants (employees or the general public) are exposed. Indoor air quality is the quality of indoor air in terms of the proportions of normal atmospheric gases and the concentration of pollutants.

Indoor air is often more seriously polluted than outdoor air. Given that many of us spend around 90% of our time indoors, this is significant. For our general health, well-being and safety, human beings require a comfortable indoor temperature with air free from dust, irritants, pathogens, unpleasant odours, mould and mildew and other contaminants.

### **Sources of indoor air pollution:**

Many factors affect indoor air quality in hotels and office buildings including:

- The level of outdoor pollution caused for example by smog, vehicle emissions and pesticides.

- Sources of indoor pollution including the materials used in the fabric of building, carpets and soft furnishings, smoking, cleaning chemicals and the use of perfumes and salon products.
- The rate of exchange between indoor and outdoor air in the form of ventilation rates and distribution.
- The amount of moisture in the indoor environment (humidity) which is considerably increased in hot humid climates, near kitchen areas and if the hotel has a gym, spa or indoor swimming pool. In serious cases this can lead to the growth of mould and mildew which has health implications.

### **Why is indoor air quality important?**

Indoor air quality is of great importance in the hotel environment for several reasons- many of them with potentially significant financial implications:

- It is your legal responsibility to ensure the safety of your staff, guests and customers at all times. This includes for example the safe functioning, adequate ventilation and proper maintenance of boilers and heating systems to avoid creating toxic fumes such as carbon monoxide.
- You are also obliged not to pose a risk to public health, for example through creating conditions for the following:
  - Legionnaires disease: this is a rare form of pneumonia that can be contracted through the inhalation of droplets of contaminated water transmitted in the form of spray. The risks are associated with poor maintenance of air-conditioning systems, showering facilities, whirlpool and spa baths and fountains.
  - Certain moulds thrive in damp and humid conditions. They can cause hay-fever like symptoms and affect sufferers of chronic lung complaints such as asthma. People with lower immunity are also at risk of infection from moulds.
  - Allergies can be exacerbated by air-conditioning, dust mites or materials to which

sufferers are allergic in guest bedrooms.

- Guest satisfaction: often guests will not complain about a stuffy environment or a room that exacerbates any allergies they may have, but they are unlikely to return or recommend your hotel to others.

- Staff productivity: staff cannot work efficiently and effectively if they are uncomfortable. Poor indoor air quality will affect their concentration, productivity and how they relate to your clients. It can cause headaches, tiredness, dry or sore eyes or throat, skin irritation, dizziness and even nausea. So-called 'Sick Building Syndrome' can have a detrimental effect on long-term health.

- You will be able to reduce your operating costs through investment in modern, energy-efficient air-conditioning equipment and proper maintenance. This will also reduce CO<sub>2</sub> emissions.