

Need for Ventilation

VENTILATION

Ventilation is effected when air is moved in such a way that fresh air replaces used air in an enclosed space. Winds and air currents keep the gases in the air well mixed in open spaces. In contrast a confined area saturated with people, the carbon dioxide, water vapour impurities, odours and bacteria increases causing the composition of the air to vary.

Fresh air is needed for human comfort. The more humans the more fresh air is needed. The measure of the amount of air is called **humidity**. Depending on the weather and the climate air has a natural humidity. This occurs because of the evaporation of water from lakes, oceans, rivers, seas and over land flow after heavy rainfall. Relative humidity is the percentage of the maximum amount of water vapour the air can hold at the same temperature. After the amount of water vapour in the air has exceeded the air is said to be saturated. Ventilation removes excess heat, moisture, impurities and bacteria from any area.

NECESSITY OF VENTILATION

Ventilation also replenishes oxygen supply. If a room is too hot or stuffy it can impair human efficiency. Most modern buildings carry out energy releasing activities and so they will produce heat, moisture, fumes and odours. A lack of proper ventilation causes damp heat, lack of oxygen and it encourages odours and rapid growth of microbes.