

## **1.2. Smoke Control System**

### **1.2.1. Smoke.**

The airborne solid and liquid particulates and gases evolved when a material undergoes pyrolysis or combustion, together with the quantity of air that is entrained or otherwise mixed into the mass.

### **1.2.2. Smoke Control.**

A system that utilizes fans to produce pressure differences so as to manage smoke movement.

### **1.2.3. Smoke Management**

A smoke control method that utilizes natural or mechanical systems to maintain a tenable environment in the means of egress from a large-volume space or to control and reduce the migration of smoke between the fire area and communicating spaces.

### **1.2.4. Smoke Zone (Smoke Control Zone)**

A space within a building where smoke may be controlled through compartmentation and pressurization.

### **1.2.5. Natural Ventilation.**

A method of supplying or removing, air from a space through openings on the exterior of a building, using natural air movement from the outside.

### **1.2.6. Mechanical Ventilation.**

A method of supplying or removing, air from a space with aid of mechanically operated equipment such as Fans and ductwork.

### **1.2.7. Smoke Exhaust System.**

A mechanical or gravity system intended to move smoke from the smoke zone to the exterior of the building, including smoke removal, purging, and venting systems, as well as the function of exhaust fans utilized to reduce the pressure in a smoke zone. Achieving tenable environment for egress is not the scope of these kind of systems.

### **1.2.8. Smoke Damper.**

A device installed within an air-distribution system or within smoke exhaust system to control the movement of smoke, i.e. to stay shut to prevent the spread of smoke into other compartments or to open to exhaust smoke outside from the fire zone through smoke exhaust ductwork.

### **1.2.9. Fire Damper.**

A device, installed in an air distribution system, designed to close automatically upon detection of heat, or through fire alarm panel signal, to interrupt migratory airflow, and to restrict the passage of flame and heat.

### **1.2.10. Combination Fire and Smoke Damper.**

A device installed in an air distribution system, designed to close automatically upon detection of heat or through fire alarm signal, to interrupt migratory airflow and to restrict the passage of flame, smoke and heat. Combination fire and smoke damper shall not be installed in an smoke exhaust system for smoke exhaust applications.