

## **1.2. Smoke Control System**

### **1.2.33. Stack Effect.**

Pressure differential resulting from a difference in density between two interconnected columns of air at different temperatures, resulting in the movement of air into and out of buildings.

### **1.2.34. Communicating Space**

A space within a building that has an open pathway to a large-volume space such that smoke from a fire either in the communicating space or in a large-volume space can move from one to another without restriction. Communicating space can either open directly to large volume space or through a passageway.

### **1.2.35. Axisymmetric Plume.**

A plume that rises above a fire, does not come into contact with walls or other obstacles, and is not disrupted or deflected by airflow.

### **1.2.36. Balcony Spill Plume.**

A smoke plume that originates from a compartment fire, flows out the doorway, flows under a balcony, and flows upward after passing the balcony edge.

### **1.2.37. Air Release**

A mechanical or gravity system intended to move air from the interior to the exterior of the building in order to provide air release for pressurization system.

### **1.2.38. Separated Spaces.**

Spaces within a building that are isolated from large-volume spaces by smoke barriers.

### **1.2.39. Smoke Curtain or Draft Curtain.**

A non-combustible solid material, beam, girder, or similar material or construction that is used to channel or contain smoke and that is attached to the underside of the ceiling and protrudes a limited distance downward.

### **1.2.40. End-to-End Verification.**

A self-testing method that provides positive confirmation that the desired result (e.g., pressure difference, airflow or damper position) has been achieved when a controlled device has been activated, such as during smoke control, testing, or manual override operations.

### **1.2.41. Fuel Limited Fire.**

A fire that has a heat release rate that is controlled by the material burning.

### **1.2.42. Growth Time (tg).**

The time interval from the time of effective ignition until the heat release rate of the fire is 1000 Btu/sec (1055 kW).

### **1.2.43. Large-Volume Space.**

An uncompartmented space, generally two or more stories in height, within which smoke from a fire either in the space or in a communicating space can move and accumulate without restriction.