

# Fire Safety systems

## Defeated by Bad Practice.



Blocked fire escape

### Objectives of a fire safety system

- Protection of life - providing a means of escape in case of fire.
- Minimize the spread of both smoke and fire spread between fire compartments.
- Prevention of building collapse as a result of a fire.
- Free and easy access to fire-fighting and rescue services personnel.

*However a system can only be effective if it is maintained and managed as per the required standard operating procedures. Further it is important that both the people responsible for safety and the users of the premises are taught the importance of good practices. It is equally important to respect the surrounding environment that facilitates both escape and rescue operations. A documented plan with set operating procedures is of paramount importance and must be the starting point of any fire safety system.*

### Fire Safety System - Management plan

**Procedures must be documented.** A set of approved general building plans (with exit routes highlighted), the fire service installation plans and any relevant documents of the fire safety provisions must be incorporated into this fire safety management plan.

The fire safety management plan should include the following:

- (a) Maintenance plan,
- (b) Training plan, and
- (c) Fire action plan

The maintenance plan should include the following documents and information:

- (a) Approved general building plans with the exit routes highlighted;
- (b) Documents indicating the details/specifications of the fire safety provisions installed;
- (c) Period for regular maintenance of the fire safety provisions installed;
- (d) Method statements for maintenance;
- (e) Repair methods;
- (f) Records of maintenance or repair works carried out;

(g) Housekeeping.

**The person in charge of fire safety must ensure that the S.O.P's stated in the fire safety management plan are implemented effectively by conducting regular inspection and maintenance of safety equipment and accessories.** Regular fire drills must be conducted and this should include providing training to the management staff on how to use fire hose reels and fire extinguishers etc. Irregularities identified must be rectified as required.

### Be prepared for a fire emergency

- Check the location of fire alarms and know how they work.
- Learn your building evacuation plan.
- Know where your two nearest exits are located.
- Learn how doors swing and where stairs lead.
- Make sure nothing blocks fire pulls, extinguishers and emergency exits.
- Learn the sound of your building fire alarm.
- Post emergency numbers (including security and first aid) near your telephone.
- Make sure you know what to do if the fire alarm sounds. Plan your escape.
- When you notice a fire:
- Pull the nearest fire alarm "pull station" while exiting the floor.
- If there is no pull station:
- Do not assume that anyone else has already called the fire department.
- Stay calm and be prepared to answer the operator's questions regarding the emergency.
- **Evacuate**

**When you hear the fire alarm:**



- Leave at once, taking direction from the emergency warden.
- Do not delay yourself by gathering personal items. Your safety always comes first.
- Before you open any door, feel the door with the back of your hand. If the door is cold, slowly open it a crack.
- If there is no smoke in hallways or stairwells, follow your building's evacuation plan. Get out quickly using designated fire exits.
- Close doors behind you. However do NOT lock the door. Locking the door hinders the fire department's search and rescue efforts.
- The stairway will be your primary escape route. Never use elevators under any circumstances.
- Once in the stairway, proceed down to the first floor and out of the building. Never go up.

### Commonly observed bad practises.

**Education and frequent training must be carried out to inculcate good safety habits. The best of systems are often defeated by bad practises as outlined below.**

- Blocked exit doors



- Obstructions in fire escape routes
- Fire doors wedged open



- Missing fire doors
- Exit lights not working
- Emergency lights not working
- Fireman access blocked
- No access for fire engines
- Blocked fire hose reel



The fire hose reel space is often used as storage space making access to the hose difficult.

- Storage within fire hose reel compartment
- Blocked fire extinguisher
- Expired fire extinguisher



- Damaged fire extinguisher
- Fire alarm panel not maintained
- Manual call point not maintained
- Hydrant blocked or not working.



- Operation of sprinklers obstructed
- Improper storage of combustibles

### Conclusion

- Standard procedures must be documented.
- Regular fire drills must be conducted.
- Training to the management staff on how to use the fire safety equipment.
- Irregularities observed during drills must be identified, documented and rectified.

**Continued education, training and increased awareness is the key to maintaining fire safety and saving lives in the event of a fire emergency.**

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