

Fire Safety Tips for High Rise Structures

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Helping People Live Safe, Secure Lives

Since inception in 1912, we have dedicated our efforts to make the world a safer, more secure place to live and work. In addition to our services, our safety breakthrough products, patents and programs have helped millions reduce their injuries, illnesses and disabilities. Carrying forward this legacy in India, our endeavour is directed towards building a safety culture by measuring naïve actions, understanding the circumstances

and monitoring the decision making parameters in hazard scenarios.

We will pursue methodical, effective and uniform actions which can be implemented in regular lives to avoid or minimise the consequences of breach. This education series is a proactive and preventative suggestion for consumption of rational mindsets in safety arena.

Overview

The incidence of fire in high rise buildings, both commercial and residential, poses maximum challenge and is one of the hardest fires to contain or extinguish. Several recorded cases of fires in such structures have resulted in massive losses of life and property. We at Liberty Videocon General Insurance value your safety and security; and bring suggestions, precautions and measures to avoid catastrophes of this nature in the future. We sincerely hope that the precautions suggested in this document will help prevent mishaps and accidental fire outbreaks.

What Triggers The Fire



Statistics

Cause	Percentage
Short Circuit	75
Throwing Away Lit Cigarette Butts & match sticks	15
Leakage of LPG cylinder	10
Fire during festivities	-
Others	-

Source : Times of India, Mumbai Edition
February 17, 2013



Case Study

1. AMRI Hospital, Kolkata

A huge fire engulfed the AMRI Hospital in Kolkata on 9 Dec, 2011, due to an electrical short circuit which ignited inflammable material lying in the basement. As many as 95 people died in the fire, most of them due to asphyxia, besides leaving many injured.

Properly installed fume extractors inside the hospital could have saved many lives.

2. Mantralaya, Mumbai


Mantralaya, the administrative headquarters of government of Maharashtra, in Mumbai, witnessed a massive outbreak of fire on 21 June, 2012, caused due to an electrical short circuit. The inferno caused an immense loss of property and high casualties.

Installation of adequate fire safety equipments at Mantralaya could have mitigated the extent of damage.


For more fire safety tips in high rises turn overleaf.

Fire Safety Measures In High Rises


These are a set of simple instructions, which, if followed can help greatly in preventing fires in high rise structures:

- All buildings must obtain a 'No Objection Certificate' from the Fire Department and must adhere to building codes.
- Building components and load bearing structures must be composed of fire resistant material. The false ceiling including all fixtures used for its suspension shall be of non-combustible material.
-  Buildings with glass facades must have a provision for emergency exits, which can be accessed during a fire.
- Security and maintenance staff must

be trained to handle firefighting equipment.

- Medium and low voltage wiring in shafts and within false ceiling must run in metal conduits. Cable conduits in stairway walls must be sealed.
-  Electric meters must be installed in a separate room. Electric meter wires must not be loose and must be maintained properly.
- Installation of circuit breakers, changing old wiring every 15-20 years, avoiding overload on electrical systems, refraining from getting illegal connections and checking power supply lines every five years must be complied with.
- Every building needs to be fitted with lightning rods, good ground connections and quality surge

arresters are must for effective earthing.

- Sufficient open space around residential buildings is essential to facilitate free movement and operation of fire service vehicles. The 'escape route' during fires should be free of any obstructions and clearly marked out.
- Maintenance of fire alarms, sprinklers, hydrants, extinguishers and the riser system that allows supply of water for dousing fires on all floors and ensuring that all these are in perfect working condition at all times. Length of hose should be adequate to reach at the last point of floor area.
-  High rises need to be equipped with high speed fume extractors, Building Control Systems (BCS) which will curtail the flames / smoke to that area.

To minimise the incidence of fire in high rise structures, it is imperative that these safety norms are followed in letter and spirit.

Trivia



The first modern fire brigades were established in France in 1699.

Benefits of Fire Safety Measures

- Reduce fire deaths & injury
- Reduce financial impact on companies due to business interruption
- Reduce property damage
- Minimise legal liability exposure
- Save time and money
- Quicker recovery from disaster

Avoid National Loss

- Loss of lives
- Loss of wealth
- Gallons of water used to douse fire

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