

# INFINITY



## FIRE MANUAL

Version: 1.0

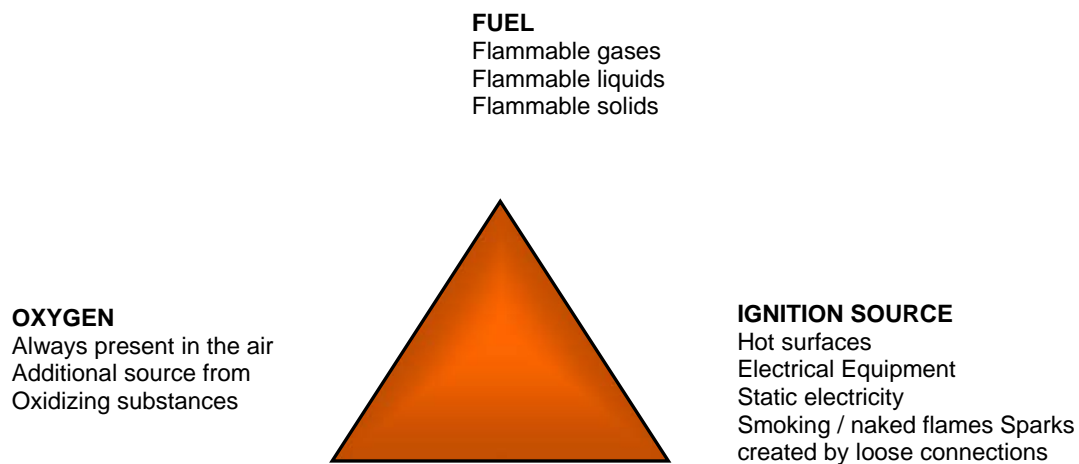
Month of Release : April 2007

## 1. FIRE

For a fire to start, three things are needed -

- A source of ignition
- Fuel, and
- Oxygen

If any one of these is missing, a fire cannot start. Taking steps to avoid the three coming together will therefore reduce the chance of a fire occurring.



Once a fire starts it can grow very quickly and spread from one source of fuel to another. As it grows, the amount of heat it gives off will increase and this can cause other fuels to self-ignite.

The following paragraphs advise on how to identify potential ignition sources, the materials that might fuel a fire and the oxygen supplies, which will help it to burn.

### 1.1. Identifying sources of ignition

You can identify the potential ignition sources in your office by looking for possible sources of heat which could get hot enough to ignite the material in the office. These sources of heat include -

**Naked flame** : smoker's material, e.g. Cigarettes and matches.

**Hot Surfaces** : Hot surfaces and obstruction of equipment ventilation, e.g. office equipment.

**Mechanically Generated Sparks** : Hot processes such as welding or grinding work.

**Electrically Generated Sparks** : Faulty or misused electrical equipment;  
Lighting equipment, e.g. halogen lamps & loose electrical connections.

### 1.2. Identifying sources of fuel

Anything that burns is fuel for a fire. So you need to look for the things that will burn reasonably easily and are in sufficient quantity to provide fuel for a fire or cause it to spread to another fuel source. Some of the most common 'fuels' found in workplace are –

- Flammable liquid based products such as paints, varnish, thinners and adhesives.
- Flammable liquids and solvents such as petrol, white spirit, methylated spirit and paraffin.
- Flammable chemicals.
- Wood.
- Paper and Card Board
- Plastics, rubber and foam such as polystyrene and polyurethane, e.g. the foam used in upholstered furniture.
- Flammable gasses such as liquefied petroleum gas (LPG) and acetylene.

- Furniture, including fixtures and fittings, especially carpets.
- Textiles
- Loose packaging material
- Waste materials, in particular finely divided materials such as wood shavings, off cuts, dust, paper and textiles.

### 1.3 Identifying sources of oxygen

The main source of oxygen for a fire is in the air around us. In an enclosed building this is provided by ventilation system in use. This generally falls into one of the two categories –

- Natural airflow through doors; windows and other openings; or
- Mechanical air-conditioning systems and air handling systems.

In many buildings there will be a combination of systems, which will be capable of introducing/extracting air to and from the building.

Additional sources of oxygen can sometimes be found in materials used or stored as –

- Some chemicals (oxidizing materials), which can provide a fire with additional oxygen and so assist it to burn. These chemicals should be identified on their container by the manufacturer or supplier who can advise as to their safe use and storage.
- Oxygen supplies from cylinder storage and piped systems, e.g. oxygen used in welding processes or for health care purposes.

## 2. Fire Detection & Fighting System

### 2.1 Fire Detection System

Following have been installed

- Fire detectors – Johnson make smoke detectors. These detectors respond to smoke & activate a hooter / alarm located on the office floor as well as IIPL's main / central fire panel to inform people on duty of a possible fire.
- Fire Control Panel - Johnson make Intelligent type.

#### Location of Smoke Detectors provided by Infinity Infotech Parks Limited (IIPL) in Common area

- Lift lobby
- AHU Rooms

#### Location of Smoke Detectors installed by the client in their office space

- Above False ceiling
- Below false ceiling

Fire detectors are hooked up with the Main Fire Panel, which is again connected with BMS to monitor alarms and the floor location of the smoke in the Tower-I & II. Every Floor is provided with a hooter.

- Smoke detectors in the common area have been installed by IIPL
- The clients have installed similar type of detectors in their office space – **which is compatible with IIPL's central Fire panel.**
- These detectors respond to smoke & activate alarm/hooter & inform of a possible fire
- Signals from detectors are also received in the fire panel / BMS
- To deal effectively & promptly with any fire, each office / client must nominate / appoint their own fire coordinator / Fire Marshall/Fire Safety Committee on a 24/7 basis
- Following action (s) will be taken by the Fire coordinator / Marshall/committee in the event an alarm / hooter is heard
  - Quickly check the floor & identify location of fire
  - Depending upon the nature of fire, use
    - Fire extinguisher
    - Hose reel available on each floor connected to the hydrant

- Inform Facility Manager office by phone who will depute the Security personnel or a Facility Manager/ Facility Engineer/executive on the floor where the fire is reported
- Gas mask should be made available by the clients for their respective Coordinator/Marshal along with Fire Proof / Heat Proof Gloves & Helmet

**2.2 Fire Fighting**

**(a) Fire Extinguishers**

Portable extinguishers are fitted at different locations in the common area meant to fight different types of fire –

Fire extinguisher plan on your floor is as follows: The clients must install adequate number of extinguishers in the office space and all employees be made aware of the location and its operation.

No.	Location	Fire Extinguisher Class, Type and Size
01	Service stair landing of each floor, Tower-I	Water CO2 - 01 (9 lit) / DCP - 01 (5 kg)
02	Service stair landing of each floor, Tower-II	Water CO2 – 01 / DCP - 01
03	Main stair landing of each floor, Tower –I	Water CO2 - 01
04	Main stair landing of each floor, Tower –II	Water CO2 – 01 / DCP - 01

The extinguishers may be categorized further according to the type of fire for which they can be utilized. For all practical purposes, the basic types of fire may be grouped into the following four classes –

- **Class “A” Fires** - Fires involving combustible materials of organic nature such as wood, paper, rubber and many plastics, etc where the cooling effect of water is essential for extinguishing fire (water CO<sub>2</sub> should be used)
- **Class “B” Fires** - Fires involving flammable liquids, petroleum products, or the like, where a blanketing effect is essential (D.C. P. or Foam should be used)
- **Class “C” Fires** - Fires involving flammable gasses under pressure, including liquefied gasses, where it is necessary to inhibit the burning gas at a very rapid rate with an inert gas, powder or vaporizing liquid (D. C. P. should be used).
- **Class “D” Fires** - Fires involving combustible metals such as magnesium, aluminum, zinc, sodium, potassium, etc. When the burning metals are reactive to water and water-containing agents, and in certain cases carbon dioxide, halogen hydrocarbons and ordinary dry powders. These fires require special media and techniques before they can be extinguished.
- **Electrical Fires:** Fires involving electrical equipments /cables etc which can be extinguished with the help of Carbon-di-oxide type or D.C.P type extinguisher.

**(b) Hose Reel**

Every floor of Tower-I and Tower-II is provided with Hose Reel which contains a rubber hose of 30 meters length and connected to the Hydrant line through a gate valve. In addition each floor is provided with a hose box which contains canvas hose of 15 meters length and a branch pipe (nozzle).

**(c) Hydrants**

These Hydrant Adapters are fitted on landings at each floor on the main stairs and on the external area around the building.

**(d) Sprinklers**

Floor-wise sprinkler is provided which will activate automatically when the temperature around the sprinkler reached 68° C.

### 3. Fire Fighting & Evacuation Plan

It is extremely essential that each office appoints a floor supervisor / Fire Marshall / Fire Safety Committee on a 24x7 basis to deal with fire & related issues. Their contact no. (Mobile phone) shall be provided to the Facility Management office by the client. For Fire fighting operation, following have been provided on each floor & have to be used by the client as per the nature of the fire / requirement.

- Fire Extinguisher
- Hose Reel
- Hydrant

#### 3.1 Evacuation Procedures

##### A copy of the Evacuation Signage has been placed in lift lobby area of each floor

In case of a major Fire which may pose a serious risk to human life requiring an emergency evacuation of the entire building premises, the following procedure will be carried.

##### 3.1.1 Role of Client appointed Fire Marshall/Fire Safety Committee

- Each client shall constitute a Fire Safety Committee/Fire Marshall to ensure that at least one member is available 24x7 or at the shortest notice.
- The floor-wise Fire Marshall of the clients will be contacted and asked to carry out the evacuation. Total evacuation of the building shall be announced on the P.A system and the location for assembly shall be indicated by IIPL on the P.A system.
- The Fire Marshall will ensure that immediately upon receipt of the evacuation notice from Facility Manager / Security Supervisor (IIPL), the people on their floor shall stop whatever they are doing and start evacuating the floor IMMEDIATELY in an orderly manner, and ensure that only the **stair-cases** are used for descending to the ground floor.
- The Fire Marshall will also ensure that no person stops by for either going to the washroom or for collecting personal belongings, or for making phone calls etc.
- The Fire Marshall should be the last one to leave the floor and must check that there is no one left on the floor, including the toilets, pantry etc.
- Once all the people are safely away from the building, the Fire Marshall will conduct a roll- call immediately to ensure that all the people are safe.
- In case any person is found missing / unaccountable, then the Fire Marshall will inform the IIPL Facility Manager immediately to undertake search and rescue operation. Under no circumstances will any individual be allowed / or try to re-enter the building or office premises.

##### 3.1.2 Role of the Facility Team of IIPL :

###### Facility Manager :

- Immediately upon activation of the evacuation procedures, will ensure that all Fire Marshall's are informed, and ensure that evacuation process begins.
- Coordinate with The West Bengal Fire & Emergency Service Department / other statutory authority to contain and eliminate the fire immediately.
- Continuously monitor the situation from the BMS, and give necessary information, instructions and updates using the PAS ( Public Address System )
- To stay in continuous touch with the Fire Marshall's and try to ensure smooth evacuation.

##### 3.1.3 Security :

- All gates will be kept open
- Will not allow any cars / Pedestrian to the premises.
- Will see that the exit and passage to the road is kept clear.
- Take up positions at the Ground floor exits of all staircases and the building's exit gates, and will direct people in speedy evacuation.
- Will get the Fire Brigade vehicle/s to the area closest to the location of Fire.
- Will control the vehicle out movement in such a way that safety of people walking out is maintained.
- Will try to control fire through the fire hydrants fitted on each floor landings or on the external areas.
- Basement Vehicle Evacuation
  - All cars will exit from the basement

- No car will be allowed inside the basement.
- All drivers present will be asked to move out with their cars. (On P.A system a corresponding message will be announced).
- Should calm down people and avoid the state of panic.

### 3.1.4 Lift-Men :

They will bring all the lifts to Ground Level and stop them. They will then assist the facility team with the evacuation procedure and first-aid, if required.

### 3.1.5 Procedure for Fire Fighting :

The following procedure should be followed in the event of a fire :

- Check up the alarm type and in case of Fire check up the location - identify the nature of fire
- Acknowledge the alarm (mute the hooter).
- Floor supervisor /Fire Marshall (clients) will be informed by the Facility Manager, or, if noticed by the Fire Marshall, then Fire Marshal shall inform Facility Manager. **(In case any other person notices smoke / fire they should inform their Fire Marshall immediately) or contact The Facility Management office.**
- Floor location as indicated will be checked up by the Facility Manager or the Security Supervisor on Duty, with Mobile and immediate measures to control the FIRE will be taken. He will be accompanied by a security guard Care should be taken that their movement should be without creating any panic amongst visitors.
- In case it is a small fire, portable extinguishers provided should be used under the supervision of the Facility Manager / Fire Marshall.
- In case of a bigger fire, Hose from the lift landing areas on floors will be pulled in the floor and water will be used to extinguish fire.
- Facility Manager will also call the Fire Brigade if he has decided that it will be required to control FIRE.
- Occupants/ Visitors will be asked to move away from the place of Fire, but care should be taken that panic among them is not created and that they move away slowly and safely.
- The electrical power supply shall also switched off for the affected floor by the Fire Marshall.

### 3.2 Responsibilities of clients

- Appoint a person/s/fire Marshall guards/s to be the Fire Marshall on a 24 x 7 (in shifts) to deal with any emergency / eventuality.
- One person (Fire Marshall) responsible for fire detection / fighting shall be always available at (24x7) the client's office. The client shall ensure that all the fire detection and fire fighting equipments are operational at all times.
- Provide portable Fire Extinguishers within your office space as and where required. In addition, there are 2 portable extinguishers provided by IIPL which are located in the Service Lift Lobby at all times.
- Ensure that all the common passages and lobbies, including the lift lobby and the main Staircase and Service Staircase Landings are kept clear **AT ALL TIMES**. No equipments, material, chairs, table etc should be stored or used in any of the common areas obstructing the entry to exit doors. In case you find some obstructions along the lift / stair landings, or on the stair-cases, please inform the Facility Manager of IIPL.
- Ensure that security guard / the Fire Marshal / employee deployed by your company is trained in fire fighting and first aid.
- Ensure that no inflammable material is stored in the office premises including packaging material / foam lining etc.
- Ensure that no Fire emergency exit door is locked at anytime.
- Keep a record of your employees
  - Emergency contact
  - Blood Group
  - Any allergies
- Regularly check all electrical connections to detect any loose connection & rectify the same. All occupants to be informed the location of Fire Extinguishers and their operation.
- To conduct "Fire Drill" for the occupants on a regular basis.
- Keep a first aid kit handy.

### 3.3 In case of Fire:

- Raise Alarm by using the "Break Glass", located at each floor.
- Use fire extinguishers to extinguish the fire
- Make all the visitors move out.
- Inform Facility Management

### 3.4 Entry

Once the fire has been brought under control and extinguished, re-entry into the building must be only on clearance from authority as mentioned below:

- In case of a major fire – Official in-charge of operations of the Fire Brigade party
- In case of a minor fire – clients' Fire Marshall / Facility Manager at site

### 3.5 Casualty Management

Maximum casualties occur as a result of asphyxia due to inhalation of smoke rather than due to burns. First aid, if provided to the victim of fire in time, will go a long way in saving his / her life.

- All clients employees should, therefore preferably be trained in elementary first aid drills. Staff should assist in evacuation of casualty, resuscitation of casualty, use of oxygen and treatment of burns. If required, the Facility Manager shall call for an Ambulance.
- In case of fire, casualties will be evacuated to the nearest hospital for treatment.
- First Aid Kit, containing necessary medicines to treat fire casualties and other related ailments should be kept ready at all times at each office. This should be prominently sign-posted. Medicines must be replaced before the expiry date. All employees must know the location of this first aid kit.
- First Aid Kit shall also be available with the Facility Team at the first floor, Tower-I

### 3.6 Electrical Shock

In case of any injury due to the electrical shock client is advised to give First Aid treatment and call Ambulance & Hospital.

**P.A System Usage - IIPL has provided a PA (Public Address) system, announcement on which can be made from the BMS room, 1<sup>st</sup> floor T-I**

- Role of public address system is vital in case of evacuation. It can be used to control the panic among occupants / visitors and important information for location of fire and the path route to take for evacuation can be announced.
- Client shall also ensure that people move out from Toilets.
- Also as per the situation other important information and advice will be given to people present in the building to evacuate safely. Based on the announcement made on PA System by Facility Manager at site drivers shall take out their cars and self drivers owners will also move their cars outside.

### 3.7 Fire Training

#### Fire Drills

The importance of being prepared has been stressed throughout this guideline. Due to the nature of the emergency actions required of the staff in a fire or other emergency situation, fire drill practices must become an integral part of staff preparedness. The fire drill shall be arranged by IIPL & clients will be informed in advance. The clients must ensure that maximum of their employees including the Fire Marshall attend the Fire Drill.

The purpose of a fire drill is to ensure that all staff is familiar with the building's overall evacuation procedures. Fire drills can be used to provide additional training for staff by allowing them to become more familiar with use of the building's fire safety systems. **Supervisory staff** should practice using the emergency voice communication system and other equipment where applicable during these fire drills to gain experience and confidence. It is very important that all personnel with specific responsibilities attend a debriefing meeting following every practice fire drill. This meeting is held to review the procedures and reactions of all participants.

During the debriefing, problem areas can be identified and, if necessary, solutions to overcome any deficiencies in the facility's Fire Safety Plan can be discussed and corrected. The date and time of all fire drills, as well as the names of participating staff, should be recorded.

#### Fire Training will constitute :

- Fire Fighting procedures
- Fire equipment
- Method of operating each type of fire extinguisher
- Location of all types of fire fighting equipment

- Methods of safe evacuation
- Material Salvaging
- First Aid
- Communication

### 3.8 Rehearsals

Regular rehearsals (once in a month) should be carried out by the clients to ensure that every one knows about:

- Escape routes and evacuation procedures.
- Location and functioning of fire extinguishers/hose reel and hydrant

### 3.9 Signage

Warning signs indicating the direction of travel should be provided in the stairwell to prevent individuals from trying to evacuate to the roof. Signs cautioning individuals to use an alternate exit stairwell or find refuge in the nearest suite/room if they encounter smoke within the stairwell should also be considered

**If you encounter SMOKE go to ALTERNATE EXIT**

### 3.10 Stairwell & Floor Identification

To avoid confusion when referring to a particular exit stairway during an emergency, every stairway should be designated with a specific letter or colour code.

Throughout the building, every stairway should be clearly identified at each floor level, including the basement.

### 3.11 Do's and Don'ts – Sample Instructions

- Raise alarm (call / break glass)
- Call Reception, Security and Administration.
- Use first aid fire fighting equipment to extinguish fire
- Evacuate as per plan (on receipt of orders or hearing alarm)
- Do not stop to collect personal belongings (it wastes precious time and endangers your life)
- Report to assembly point
- Report to your in-charge for head-count
- In case of escape route is engaged or it is not possible to escape for any other reason go to fire refuge area

Tower-I – 6<sup>th</sup> & 8<sup>th</sup> Floor

Tower-II – 6<sup>th</sup>, 8<sup>th</sup> & 12<sup>th</sup> floor

#### **If escape route is cut-off –**

- Do not panic - Keep cool and calm - THINK.
- Walk, do not run. You will inhale excessive smoke and poisonous gases.
- Close all doors and windows.
- In case trapped, signal for help.
- Lie low - smoke and poisonous gases will be less at lower levels.
- Use wet cloth to cover face and nose.
- Do not take shelter in the bathroom, as it may be more prone to get clogged due to smoke.



**Emergency Contact Numbers:**

No.	Name / Agency	Contact number(s)
1	Police Station	100, 23675174 (Sector-V outpost) 23590849 (Bidhannagar East P.S) 23215162
2	Fire Brigade	101 & 22521165 (H. Q.) 23575293 (Sector V)
3	Ambulance	24847294 24754169 9830452536 9830181286 9831177367
4	Hospitals	Anandalok – 23592931 / 23592933 Bidhannagar Govt. Hospital – 23373953 Apollo - 23585211 Ruby - 24426091, 24426576 Calcutta Medical College - 22414901 AMRI – 24612626

**I IPL Emergency Contact Numbers:**

No.	Name	Contact number(s)
1	Facility Manager	23575720 (Direct) 23573686 (Board) 9831678908 9831678924
2	Security Manager	99030-99426
3	Customer Care	9831339768 (Manager - Customer Care) 9831905551 (Asst. Manager - Customer Care)

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