



Fire Fighting

Fire Alarm & Detection System

GST : 21GNLPS7947Q1ZU

 **ACHYUTA**[®]
Fire Safety
ISO 9001 : 2015 Certified

Fire Fighting System

FIRE EXTINGUISHER

Fire requires fuel, heat and oxygen to burn. Fire extinguishers apply an agent that will cool burning heat, smother fuel or remove oxygen so the fire cannot continue to burn. A portable fire extinguisher can quickly control a small fire if applied by an individual properly trained.

There are four classes of fire extinguishers – A, B, C and D – and each class can put out a different type of fire.

Class A – fires involving solid materials such as wood, paper or textiles. Class B – fires involving flammable liquids such as petrol, diesel or oils. Class C – fires involving gases. Class D – fires involving metals. & Class K – For kitchen purpose.

Types of Fire extinguisher

- ABC type fire extinguisher
- Co2 type fire extinguisher
- Dcp type fire extinguisher
- K-type kitchen fire extinguisher
- Clean agent fire extinguisher
- M. Foam type fire extinguisher

Products available with variety of weights starting from 2 kg onwards to above.

Fire Extinguisher Refilling

Fire extinguishers need to be recharged after each use – even if they aren't empty – to ensure that there will be enough pressure and suppressant liquid to properly extinguish another fire. They should also be recharged if they become damaged, or periodically throughout their life span.

We provide :-

Inspection tag

Maintenance record on having refilling



Fire Hydrant & Sprinkler System

It is designed to provide rapid access to water if a fire breaks out. Fire hydrant installation consists of a system of **pipe work** connected directly to the water supply main to provide water to every hydrant outlet and is intended to provide water for the firemen to fight a fire. The water is discharged into the fire engine form which it is then pumped and sprayed over fire.

Where as A fire sprinkler (UL/FM Listed) system is a type of automatic extinguishing system (AES) that prevents fire growth and spread by releasing water through a series of sprinkler heads connected to a distribution piping system. Water is released through the sprinkler heads once the surrounding air reaches certain temperature. sprinkler head consists of a plug held in place by a trigger mechanism. The most common type of trigger is a glass ampule filled with a glycerin-based liquid with different temperature levels for different areas of useage, that expands when heated. as the trigger mechanism is heated to the required temperature, it /breaks the liquid filled glass and the water is released.

Products Use in Fire Hydrant & Sprinkler System are as follows.

- Fire Hydrant valve
- Fire Hose reel drum
- RRL Hose pipe
- Double/Single Door Hose pipe Box
- Isolation and control valves/ maintenance valves for pipeline.
- Fire Pump with accessories
- Fire Automatic Control panel
- Wiring and instrumentations
- Fire Brigade connection
- Nozzles
- Fire sprinkler – upright, side wall, pendant type Sprinkler



Fire Pump System

Fire pump receives water from either an underground water supply or Terrace water tank or from any reservoir, and is powered by electricity or diesel fuel. The high-pressure supplied by the pump distributes water through the Fire hydrant & Sprinkler pipe line system .

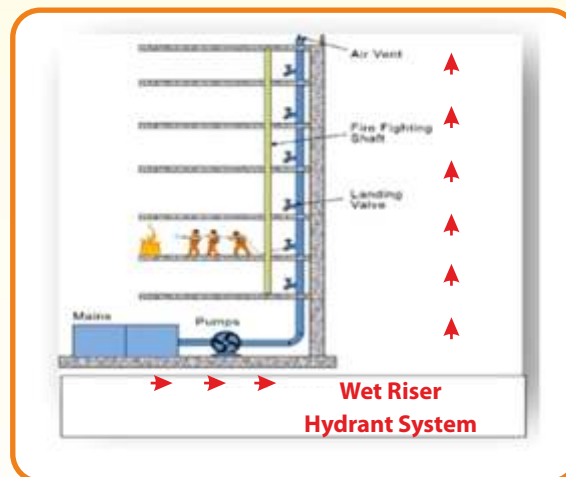
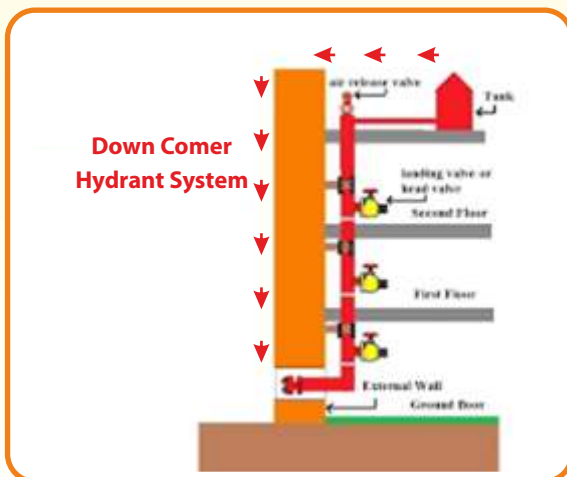
We Provide Fire pump room set-up:-
Which includes

- Jockey Pump
- Main Electric Pump
- Diesel Engine Pump
- Down Comer Pump
- Fire Control Panel For Automation

All side accessories include valves and fittings.

There are 2 types of pump system :-

- Wet Riser
- Down comer



We Provide the pump section installation and maintenance by our fire safety professionals. There are many considerations for pump capacity selection and setup as per the National Fire Protection Association (NFPA) and the National Building Code (NBC) as per Area, Types of building & Work Place category which are updated from time to time.

Fire Door

Fire door is a door with a fire-resistance rating used as part of a passive fire protection system to reduce the spread of fire and smoke between separate compartments of a structure and to enable safe egress from a building, factories etc. Fire doors are part of a building's PASSIVE fire protection system, an essential requirement for All public buildings, offices and factories.

Fire Door

All rooms in any of these situations are separated from other rooms, or compartmented, in order to:

- **keep any fire in the compartment in which it starts**
- **protect the occupants of other compartments**
- **provide a safe, protected route to allow the occupants to escape.**

The walls, ceilings, entrances and exits are therefore designed to resist the fire for a specified period of time

The simple purpose of a fire door in every day use is just as any other door. However, since a breakout of fire is never predictable, the fire door, unlike any other door, must then perform its prime purpose – to protect lives and offer protection to the remainder of the building and to other buildings.

They are available in double or single door as per requirement.



Fire Alarm & Detection System

A fire detection and alarm system (FDAS) provides audible and visual signals as a result of the operation of manual or automatic fire alarm initiating devices such as a Manual Fire Alarm station, smoke detector or heat detector or from other protective equipment such as a fire sprinkler system.

A fire alarm system warns people when smoke, fire, heat or other fire-related or general notification emergencies are detected. These alarms may be activated automatically from all kind of detectors like heat, smoke, multi sensor. or may also be activated via manual fire alarm activation devices or from any other input device connected to the fire alarm panel.

You can also integrate fire alarm system with other outer devices to Shut OFF or ON as per specific require needs on the work place or building.



Fire Alarm & Detection System

2 Types of Fire Alarm System :-

● Conventional Fire alarm system

conventional systems only give information about specific circuits (zones).

● Addressable fire alarm System

Addressable fire alarm systems give information about individual detectors or device connected. It is a digital system with a digitally programmable main Fire panel. Smoke Detectors



Fire Alarm & Detection Equipment Includes

- ◆ Manual Call Point
- ◆ Hooter / Sounder with Flash
- ◆ Smoke / All types of Detector
- ◆ Other Detection Accessories



Public Address System (PA)

Public Address System (PA system) is an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to address a large public, for example for announcements of movements at large area, apartments, factories and commercial places. As per fire safety Norms.

Public Address and Voice Alarm systems allow safe and controlled building evacuation to be managed in the case of an emergency. Clear voice messages can be initiated from the system to aid building evacuation.

Public address system consists of

- Mixer Amplifier
- Speaker
- Micro-phone



Talk Back System

Fireman Intercom System is a special equipment for fire fighting communication. When a fire alarm occur, it can provide convenient and fast means fo communication, and it is an indispensable communication equipment in fire control and alarm system

The Fireman Intercom System provides a reliable communication between the Master Console (Fire Command Center) and the remote Handset Stations. The system consists of a remote handset station and Master control panel which is normally installed at the Fire Control Room.

- Talk back system consists of
- Talk back selection panel
- Telephone jack
- Telephone handset



Lift Pressurization System & Basement Ventilation System

Lift pressurization systems are made to create high pressure by mechanical ventilation to prevent the smoke from accessing the lift shaft. They also help defuse the smoke and make the evacuation routes smoke-free, allowing people and firefighters to escape and stop the fire from increasing.

Elevator pressurization prevents smoke from flowing into elevator shafts and threatening occupants on other floors.

Preventing the access of smoke in lifts

They automatically operate to provide air pressurization in lift well . this system is integrated with fire alarm panel . so that whenever fire alarm system get activated or triggers signal , lift well also get pressurized through pressurization fan.

Lift pressurization system includes products like:-

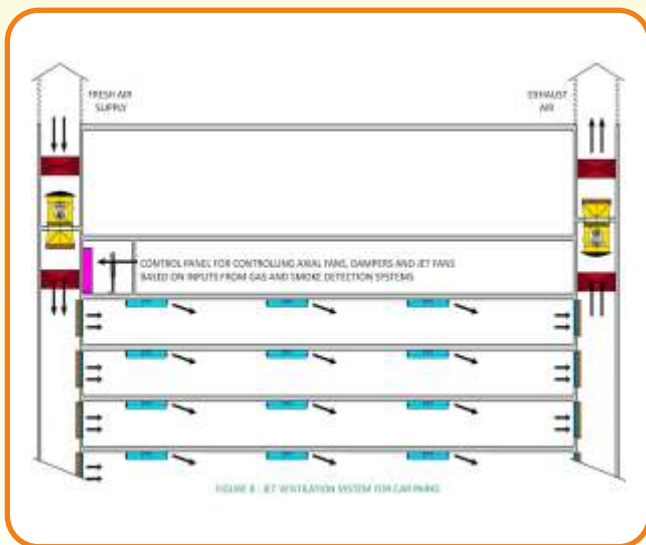
- **Axial Flow Fan with required CFM**
- **Automatic Panel for pressurization**
- **M.S Base frame with anti- vibration pad for the blower**
- **Ducting between blower outlet and shaft fabricated with GI sheet.**



Basement Ventilation System

Fire safety requirements for basement situations involve ventilation which would allow the smoke and heat to pass directly into the outside air, reducing the temperature and the amount of smoke the fire produces within the basement. As per fire safety Norms.

- **Smoke Exhaust Axial Flow Fan**
- **Accessories for fixing on the roof / supporting base including mounting bracket/channels/hangers complete.**
- **Control panel with logic controller**
- **CO Detectors Other Fitting accessories**



SYSTEM AND SOLUTIONS WE OFFER

- ★ Gas based Fire Suppression System (FM – 200/NAF S125/NOVEC – 1230/IG541/ARGONITE/CO2) Quick Detection and Suppression System for kitchens, Industries etc.
- ★ Passive fire Protection/ Fire Stopping Solution.
- ★ Foam Fire Suppression System .
- ★ Nitrogen Injection Oil Evacuation System (NIFPS) for transformer
- ★ Medium /High Velocity Water Spray System .
- ★ Automatic Hydrant, Sprinkler and Fire Alarm & Detection Systems.

We Provide Sales & Services All Over Odisha



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