

Implementing Dangerous Goods Fire Suppression Systems in your Battery Cabinets, Safety Cabinets or Outdoor Chemical Stores can help your workplace suppress a chemical fire as soon as it breaks out. Read our Product Manual to learn more about the use and maintenance of this fire suppression solution.

REMEMBER: Storemasta can install Fire Suppression within your storage equipment, or you can purchase a kit to install it yourself in an existing unit.

## Overview

A fire can be extinguished by removing any one of the four elements: OXYGEN, HEAT, FUEL, CHAIN REACTOIN.

In practical fire-fighting terms, this translates as starvation, cooling, smothering, and interference:

- **Starvation:** depriving the fire of fuel, i.e. combustible materials.
- **Cooling:** depriving the fire of heat, e.g. by applying a substance such as water that will absorb heat from the fire and reduce the temperature below the critical level needed to sustain the fire.
- **Smothering:** depriving the fire of the oxygen needed to sustain the combustion process.
- **Interference:** applying extinguishing agents to the fire that inhibit the chemical chain reaction at the molecular level.

All fire suppression operates on these principles, with their various extinguishing agents removing one or more of the four elements from the fire.

**FirePro® aerosol extinguishes fire by inhibiting the chain chemical reactions present in combustion on a molecular level.**

The FirePro® Dangerous Goods Fire Suppression System activates when a specific temperature is detected, automatically releasing a non-pressurised, non-toxic aerosol that inhibits the chain reactions of combustion on a molecular level.

REMEMBER: Storemasta offers two main types of Dangerous Goods Fire Suppression Systems – the monitored and non-monitored systems.

## Compliance

Your Dangerous Goods Fire Suppression System is listed to AS 5062 Fire Protection for mobile and transportable equipment (MONITORED FIRE SUPPRESSION SYSTEMS) and AS 4487 Condensed aerosol fire extinguishing systems (NON-MONITORED FIRE SUPPRESSION SYSTEMS).

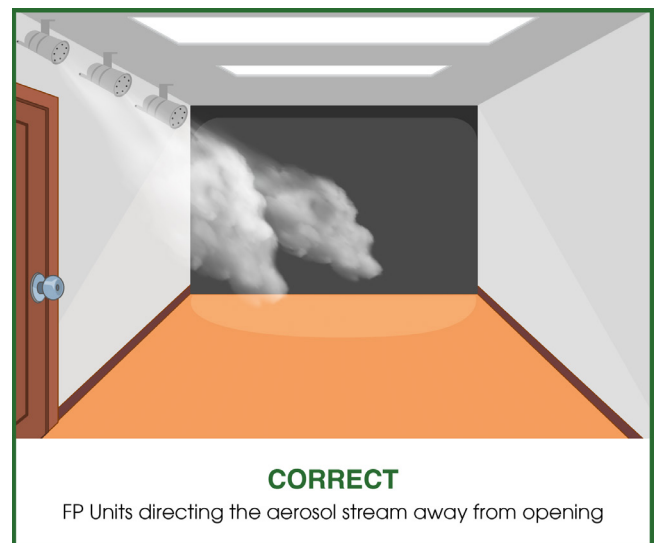
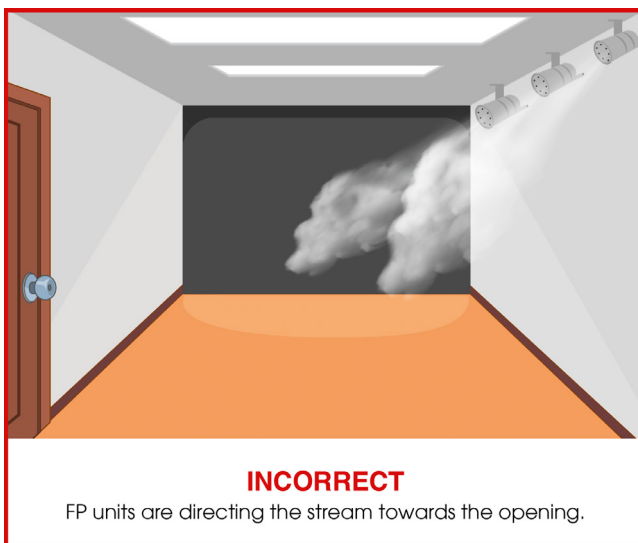
It's been manufactured Under ISO 14001 / 9001 Standards and offers a 15-year life span.

## Lithium-ion Battery Fire Suppression Tests

FirePro has conducted more than 70 Li-Ion fire suppression tests over the last 5 years, with accredited laboratories and prominent lithium-ion battery manufacturers. The active agent in the condensed aerosol suppressant has been proven to be effective in neutralising and controlling a fire, preventing the propagation of thermal runaway – a key risk with lithium-ion battery fires.

## Equipment Location

The equipment must be installed in a way that is effective for fire suppression. Dangerous Goods Fire Suppression Systems must be installed with units directing the stream away from the cabinet or store opening. They must NOT be installed so that the aerosol stream disperses towards the opening as this will inhibit fire suppression effectiveness.



## Servicing & Maintenance

The FirePro Suppression system should be serviced at least every 6 months in accordance with AS 1851, more often in aggressive environments.

Regular visual inspections of the system must also be conducted by the operators to ensure all installed parts are free from debris, rust, or electrical faults.

Six monthly servicing must be undertaken by accredited service technicians.

**IMPORTANT:** No personnel should be in the risk area during testing until the firepro units are disconnected and test modules in place.

## Servicing & Maintenance Procedure

1. Disconnect the FirePro activation circuit (Yellow) at the panel, and connect the FirePro simulator.
2. Visually inspect all installed FirePro Generators, cable, connections, detection devices and siren/strobes. Look for any signs of damage or wear and replace as necessary.
3. Activate the system – after ensuring the FirePro Simulator is connected.  
Note: The FirePro Simulator will stay illuminated until the reset button on the simulator is pressed.
4. Reconnect the FirePro activation circuit.

## System Logbook

A logbook must be kept, recording all the relevant events concerning the installation. The logbook contains the items required that give a picture and provide for the recording of various things during the life of the installation.

## Content of Logbook

- General details
- Devices used
- Schematic diagrams
- Photos of the original installation
- Inspection reports

## Operation-Activation

Should the system be activated:

1. keep the FirePro suppression gas within the risk until the fire is extinguished and not re-ignite.
2. in case of emergency, ensure all occupants have left the risk area and where possible alert emergency services.
3. DO NOT open any doors/hatches to the risk area for at least 20 minutes, to prevent re-ignition.
4. After 20 minutes, the Aerosol will fall to the ground as dust. Check risk area that is safe and commence clean-up with warm, soapy water.

**NOTE:** The FirePro Aerosol generators are single use items, so will need to be replaced if they discharge.

**REMEMBER:** All workplaces should have systems and emergency plans in place to deal with a chemical fire if it does break out. Notify your local fire services if you have a lithium-ion battery fire due to the risk of reignition of the batteries.

## **Warning - Battery Management Products**

For Storemasta Battery Management solutions equipped with MONITORED Fire Suppression Systems, ensure that you understand the following:

The equipment is fitted with an automatic fire protection system. When the system operates it:

- Activates the FirePro Aerosol Generators which are located in the cabinet
- Advises the Fire Management System that the system has activated
- Does NOT initiate any shutdown of equipment.

### **Before opening the battery unit:**

1. Initiate emergency procedures.
2. Power to the equipment should be shutdown.
3. Check temperature of the battery cabinet or store door to ensure it is safe to open.

## **Safety Warning**

If exposure to extinguishing agent on eyes or skin occurs, flush thoroughly with water, move to well-ventilated area. If irritation persists, seek medical attention. Extinguishing agent is non-toxic. • Inspection reports

## **Get In Touch**

Need some more advice on the installation or use of your lithium-ion battery cabinet? It's easy to get in touch with our Storemasta team. Simply send your enquiries to [sales@storemasta.com.au](mailto:sales@storemasta.com.au) or give us a call on 1300 134 223.