

The need for fire prevention, detection and suppression

If you own a business or manage an organisation, you should be aware of how devastating a fire can be.

Not only do fires reduce profits by damaging property, equipment and assets, but it also increases downtime, and it is a serious safety risk for you and your employees.

While not all fires are entirely preventable, there are many steps you can take to increase your chances of preventing fires early and reacting rapidly to minimise risk, thus preventing unrecoverable damage to expensive equipment and valuable assets and material.

National Building Regulations and Building Standards Act-103-1977.

Asset insurance fine-print:

It is a condition precedent to liability that your business complies with the National Building Regulations and Building Standards Act-103-1977, or with any similar applicable legislation, and the regulations thereto as well as any other regulations or provisions in any by-law concerning the installation, maintenance and servicing of all fire protection and firefighting equipment.

According to the SANS 10400 and SANS 10139:

- Provision and maintenance of fire-fighting equipment, installations and fire protection systems.
- Any fire-fighting equipment, installations and fire protection systems in any building shall be so installed and maintained as to be ready for their purpose at all times.
- The disposition of such fire-fighting equipment shall be visible at all times or shall be indicated by symbolic signs which shall be visible at all times and comply with the requirements in SANS 1186-1.
- Such fire equipment shall be so installed that it facilitates maintenance. Where compartments are created to house this equipment, they should not impede maintenance.

The key to safeguarding your business and its valuable assets from the threat of fire is an understanding of the differences between fire detection, fire protection, and fire suppression.

What is a fire detection system?

With the right fire detection system, the human and equipment cost due to damage can be significantly reduced.

Electronic detection systems most commonly work with alarms to immediately notify those in the vicinity or are connected to a monitoring system.

This provides warning of a fire to building occupants and can provide information to emergency responders on the location of the fire, speeding the process to control the fire.

What is fire protection?

A fire protection system aims to protect a building's occupants, equipment, assets and material while minimizing the damage associated with a fire.

What are the types of fire protection systems?

Fire protection systems can be categorized as either active or passive.

Active systems actively help fight fires with smoke and heat detectors and alarms to trigger the fire suppression system to stop a fire before it gets out of control.

Passive fire protection involves design like walls and structural supports to minimize flammability and the spread of smoke.

Passive fire protection is a broad umbrella with many underlying tactics. Apart from preventing the spread of fire, it also helps to maintain a building's structural integrity.







Compartmentation is a strategy to stop smoke from penetrating other areas, so specialists install fire doors, walls, and cavity barriers.

What is fire suppression?

An appropriate fire suppression solution is commonly designed in conjunction with an active electronic fire detection system and is built to extinguish fires as quickly as possible through the application of fire suppression agents.

In contrast, non-electronic systems will activate and deploy the fire suppression agent without notification.

Types of fire

CLASS	RISK	WATER	GAS
	Involves solid material such as paper, wood and textiles.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Involves oils, petrol and diesel.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Involves flammable gasses such as propane, butane and methane.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Involves metals such as aluminium, magnesium, titanium and swarf.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Involves electro-mechanical and electronic equipment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Involves cooking oil and fats, such as in deep-fat fryers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Not all fire suppression systems use gas to put out fires, but many do.

Unlike water, powder, or foam fire suppression systems, gas suppression systems put out fires without damaging equipment, and do not require any suppression related residue clean up.

In closing

Cobey Fire SA designs and engineers fire detection, prevention and suppression systems with each client's specific needs in mind.

We will address all levels of potential fire threats to your business, and our goal is to provide you with the peace of mind you deserve, and customised solutions are our speciality.

We have also, in-house, developed our **FIRESAFE** Oxygen Reduction Fire Prevention Systems. **FIRESAFE** can be seen both as a prevention and a protection fire safety measure. The traditional control or suppression fire systems are used once the damage has already occurred, the use of **FIRESAFE** will prevent a fire from igniting, improving business continuity and property protection.

So, don't hesitate to give us a call should you need our assistance to get it right.



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