WESTSIDE
FIRE SERVICES
'CARING AND RESPONSIVE"

OUR SECTORS

Aged Care

Commercial

Data Centres

Education

Health Care

Hospitality

Industrial

Residential

Retail

Special Hazards

Strata

Established in 1984, Westside Fire Services specialises in fire minimisation solutions to maximise life safety and asset protection. We design, install, service and maintain a full range of fire protection and firefighting systems.

Historically our markets have primarily been in the Perth metropolitan area, focusing on new construction projects as well as servicing residential, commercial and industrial sites.

Westside has in excess of 700 client sites and completes an average of 1,350 jobs every month. We have highly motivated people that we train internally to meet our company standards.

We only employ qualified tradespeople to service our clients. Our team includes electricians, sprinkler fitters, carpenters and FPA certified inspection technicians. We are dedicated to completing and maintaining projects to an exceptional standard with a friendly and professional service.

CARING AND RESPONSIVE

For over 30 years we have understood the key to providing the best fire minimisation solutions is relationships. You don't need another 'off the shelf' design, talk to people who care.

We pride ourselves on taking the time to understand your requirements and then working closely with our network of suppliers to develop project specific options. This approach ensures that we consistently deliver high quality solutions, no matter the project size.

OUR SOLUTIONS

We don't just have out of the box solutions. For every project we consider the design objectives and budget and then provide answers. Our products are cutting edge and comply with the latest Australian and International standards.

Westside is proudly Western Australian owned and operated, we provide the highest quality fire protection products from our network of trusted suppliers. We strongly support Australian manufacturers and whenever possible equipment is sourced from within WA.

Fire Detection	Occupant Warning	Exit & Emergency Lighting	Fire Extinguishers	Fire Doors
Fire Hose Reels	Fire Hydrants	Fire Pumps	Gas Suppression	Sprinkler Systems

Design

We design solutions, tailored to your building.

Installation

Our installation teams are focused on delivering on time and on budget projects.

DESIGN & INSTALL

Westside Fire Services are the experts when it comes to the design, supply and installation of fire minimisation solutions. For over 30 years our Design and Installation teams have successfully delivered hundreds of on time and on budget projects. Being a multi-discipline provider allows us to offer you a total site package, ensuring all your fire systems integrate seamlessly together. We have designed safe and efficient systems for a wide spectrum of industries including apartments, data centres, hotels, nursing homes and offices.
Your safety is priority, and the care and effort we put into our work will reflect that.

The Aged Care Act 1997 is the main law that covers government-funded aged care. These facilities could include certain Class 9a healthcare buildings, Class 9c aged care buildings or Class 3 residential aged care buildings. Amendments made to the Act put obligations onto approved providers of aged care facilities to submit an annual Fire Safety Declaration.

Fire Safety for Aged Care Facilities is not only important for the health of the patients but required by Australian regulatory reform laws. Aged care facilities must be accredited under the Accreditation Standards for Residential Aged Care.

Fire protection in the aged care sector requires both careful planning and technical knowledge, given the need to safeguard infirm and often immobile residents as well as the intricate medical equipment housed in such facilities. Inadequate or improper fire protection can expose residents and staff to dangers, leading to potential injury or even loss of life.

When developing a fire protection solution for an aged care facility, fire protection specialists will consult with a variety of personnel including facility management and staff to gain an understanding of the needs and fire hazards specific to the facility, which would help them develop the most appropriate solution to suit the fire risks.

Fire sprinkler systems can protect general areas within the facility while more specialised fire suppression systems can be installed where cooking facilities and equipment are situated. They will be required to improve the housekeeping and maintenance procedures so that a clear path is always available for emergency exits in case of emergency.

Fire safety training is also extremely important as it can help ensure that staff and occupants are aware of the building's emergency management and evacuation plan. In the event of a fire, elderly and immobile residents will require special assistance to evacuate from the building. When a smoke alarm sounds, every staff member should know exactly what to do. A decision will need to be made quickly on whether to evacuate the patients.

With frail and often immobile residents the installation and maintenance of fire systems for aged care requires planning and a respectful understanding of the environment.

Technical expertise is essential to ensure inadequate fire systems do not expose patients and staff to unnecessary risk.

The Western Australia Department of Health's licencing standards for Nursing Homes have mandatory criteria for fire systems and emergency response systems and processes which promote patient, staff and visitor safety.

- Staff are trained to recognise and respond to emergencies.

- Fire orders and up to date evacuation plans are displayed throughout the facility.

- Fire drills, equipment training, and evacuation procedures are carried out annually for all staff.

- Exits are available for egress, either at all times, or the door hardware releases on fire alarm or power failure.

- Fire hydrants and fire exit doors are clearly marked, easily accessible and free from clutter or equipment.

- Fire equipment, including extinguishers and hose reels, is ready for immediate use and tested six monthly as evidenced by a current service tag.

- Flammable rubbish is managed in a way that it does not pose a fire risk.

- Automatic fire detection and alarm systems are functioning and tested in accordance with AS 1851, and service and maintenance log books are kept in the fire indicator panel.

Apart from conventional fire protection challenges in many occupancies, a high-rise building is also faced with other inherent, intractable challenges. There are challenges such as inaccessibility by fire equipment due to height factor; stair egress and smoke stack effects; conflicting fire safety management within and between different floors; re-designing and changes from initial intended use and; complex vertical utility services especially the heating ventilating and air conditioning conduits (HVCAs).

There are no simple rules to follow for commercial properties because each building is different, both in its layout and fire risks. However, when a fire occurs the priorities in all buildings is early detection and orderly evacuation.

If fire systems are not properly maintained serious damage can occur to the building and the contents. Occupants can also be exposed to unnecessary risk due to broken warning systems and damaged fire doors.

The Department of Fire and Emergency Services (DFES) provides advice to Building Surveyors (Certifiers) and other fire safety practitioners to ensure plans for construction of new commercial and industrial buildings in Western Australia are fire safe in accordance with the fire safety sections of the Building Code of Australia (BCA).

DFES conducts inspections of major projects to ensure firefighting equipment is installed as designated in the approved plans. Certain equipment is then tested for compliance with Australian Standards and to ensure it will meet the needs of the fire service.

The Western Australia Department of Mines, Industry Regulation and Safety has produced a guide to inform building surveyors, fire engineers, designers and others involved in developing and approving Performance Solutions relating to fire safety, of the practice that is expected by the Building Commissioner when developing fire safety Performance Solutions in Western Australia.

It also provides the basis of a Code of Practice for those involved in developing and approving performance fire safety solutions and is used as a benchmark when auditing registered building service practitioners and contractors.

While the Deemed-to-Satisfy Provisions often provide a ready-made building solution with certainty of compliance, they may not always be cost effective or appropriate for every circumstance. The Performance Solution option allows flexibility and innovation in design. Performance Solutions are commonly used for the fire safety provisions of the BCA and involve fire engineering.

Developing a fire safety Performance Solution is often complex and requires stakeholder input. This adds time to the overall project schedule, so it is important to consider Performance Solutions early in the design and not as a last minute fix to poor design or construction. Furthermore, a Performance Solution is not a mechanism for accepting non-compliance with building standards but a pathway for demonstrating compliance with the Performance Requirements of the BCA. The onus is on the professional(s) carrying out the Performance Solution to provide sufficient documentation, evidence and validation to the certifying building surveyor that the solution complies with the relevant performance requirements. The building surveyor provides guidance and interpretation on the BCA for the specific project.

While existing buildings would be expected to contain a combination of fire safety measures, they may not contain the same scope of measures as would be expected in a contemporary building of the same classification and size. This outcome may well be a product of historic building codes tending to rely on passive fire safety measures to a higher degree than current National Construction Code Deemed-to-Satisfy Provisions.

A data centre is a facility used to house computer systems and associated components, such as telecommunications and data storage systems. They are processing an ever increasing quantity of videos, voice and data throughout a global network. Applications such as social media, cloud computing and online banking impact our life every day.

With the value of data being extraordinarily high, down time is not an option. Servers are packed together, the power is always on, they generate heat, and while not widely publicised, they do catch fire.

Assets surrounding the fire suffer collateral damage from water and smoke, with smoke contamination often destroying other nearby electronic equipment. The cost of business interruption, including software recovery and clean up is often significantly more than the cost of the asset destroyed in the fire.

All personnel working in the data centre should be trained on what to do in a fire-related emergency. It is also important to have a plan for any emergency situation. Run through fire drills, evacuation plans and recovery plans to keep everyone up to speed. Each person in the data centre must know how to operate a fire extinguisher. There should be a sign next to every extinguisher that clearly indicates what type of fire they can be used on.

> **The high value and sensitivity of the electronic equipment found in modern data centres, combined with the consequences of system interruption, makes fire protection a critical component of any risk assessment.**

Fires can occur within the digital equipment, wires, cables, HVAC equipment, raised floors, suspended ceilings, and other combustibles found in data centres. Uninterrupted power systems and their storage batteries pose an additional fire risk.

These fire risks lead data centres to address fire protection at three different levels – building level, room level, and a rack-level (in-cabinet).

Building Level Fire Protection

The first level of fire protection is at the building level. The main goal is to protect the building and employees from fire. The type of fire protection most commonly used is fire sprinklers and handheld extinguishers. A building can also use passive fire protection, which is the installation of firewalls and fire-rated floor assemblies that considerably delay the spread of fire into other areas of the building.

Room Level Fire Protection

A wet pipe sprinkler system has the water already present in the piping and can immediately disperse once the alarm activates. The downside to this type of sprinkler system is the pipe can leak and drip onto equipment in the room. A pre-action system is the most commonly used for room fire protection. It requires at least two points of fire detection to activate the sprinkler system. However, water can cause as much damage to servers and hard drives as a fire would.

Many data centres prefer gas extinguishing systems. Clean agent gas systems have a smaller footprint than inert gas systems because they do not require as much agent to fill up an entire room. Clean agent gases are electrically non-conductive, non-corrosive, and leave no residue upon evaporation. This makes them the ideal fire suppression agents in data centres. Like fire sprinklers, these systems have a piping system installed throughout the room. The system activates through smoke and heat detection, and the clean agent gas disperses evenly throughout the room through nozzles.

Rack Level Fire Protection

The last level of data centre fire protection is at the rack level. This fire protection is essential to protecting specific equipment and limiting damage. Installing a pre-engineered automatic fire suppression system will protect the equipment by detecting the fire within seconds and suppress it before the total flood or sprinkler system activates. This prevents equipment damage caused by a water-based sprinkler system and avoids the discharge of large amounts of agent in a total flood cylinder which is expensive to refill.

Educational buildings are structures where the implementation of fire safety is of the utmost importance. The majority of school occupants are children and youths who easily panic and are difficult to manage in the event of an emergency or crisis.

Damage may be devastating when a school has a fire, as they play an important role as temporary meeting places for children, teachers and communities.

Educational buildings need to meet the building standards operational at the time of the approval to build. In 1997, Western Australia gave the Building Code of Australia (BCA) the status of building regulations.

The BCA contains technical provisions for the design and construction of buildings and other structures and covers important issues as fire resistance, access and egress, services and equipment and aspects of health and amenity.

While the BCA applies to new buildings, proprietors and principals (or equivalent) of schools have a common law responsibility to ensure that older buildings are safe for educational purposes. In a dispute regarding the safety or appropriateness of a building, guidance is often sought by referring to the BCA.

For older buildings, it is advisable for the proprietor and principal (or equivalent) of a school to refer to local government requirements with respect to compliance with the relevant sections of the BCA.

School dining facilities are a concern as the risk in any kitchen is high simply because it is where the food being cooked, or oils and fats used, can burn, and cause a fire to spread. If there are boarding facilities then there will be a 'sleeping risk', which will need careful consideration. Special needs pupils may also need additional facilities, this means providing refuge areas/places of temporary safety in case of fire.

False fire alarms can be a serious issue for some schools. The causes of false alarms can be varied, including students activating Manual Call Points. Avoiding false alarms may require a change in behaviour, a management response, a technical solution or a combination of solutions.

Educational facilities can have the same hazards as other workplaces, but they also have a range of risks associated with their function. Schools and universities are often the target of accidental fires or arson.

Also, many educational facilities incorporate laboratories or workshops where staff and students may be exposed to fire hazards, dangerous substances and machinery.

The most common sources of fires in schools are arson, overloaded electrical systems, fuel store areas with high oxygen and materials that produce toxic fumes when heated.

Some areas in educational buildings have a higher than ordinary fire risk and particular consideration and precautions ought to be taken in such areas. Facility managers or a responsible person should implement procedures to;

- Keep all storage and waste storage areas clean.
- Maintain proper fire exits and exit signage (e.g. exit signs that can function in a power failure)
- Place and maintain fire extinguishers in easily accessible places.
- Properly store and use of hazardous materials that may be needed for students or operational requirements.
- Prohibit flammable materials in certain areas of the facility.
- Maintain fire alarm systems for detection and warning of fire.
- Obtain and maintain a complete inventory of fire safety equipment in school.
- Maintain a high level of training and awareness of students, staff and other users of the school building.
- Conduct fire drills at regular intervals throughout the year.

Fire safety is one of the highest pressures and significant components of healthcare facility management. The people inside these facilities — unlike a shopping mall, school, or sporting arena — are often sick, disabled, or elderly.

There are special concerns due to the occupants' ability to respond to fire alarm signals on their own accord. It is recommended that all healthcare facilities are designed, constructed, maintained and operated to minimise the possibility of a fire emergency requiring the evacuation of occupants.

Because the safety of healthcare occupants cannot be ensured adequately by dependence on evacuation of the building, their protection from fire must be provided by appropriate arrangement of facilities, adequate staffing, and development of operating and maintenance procedures.

With frail, often immobile patients fire protection in healthcare facilities requires careful planning and technical knowledge. It is important that healthcare providers seek professional assistance to ensure a tailored solution is implemented for their facilities.

This includes emergency procedures for mobility restricted patients and localised systems for valuable medical resources.

The Western Australian Department of Health has issued building guidelines that includes fire services. The Proprietor of a health care facility shall define the fire safety strategy and extent of fire services to be provided and the performance required which shall be not less than as required by the National Construction Code, other statutory regulations, Fire and Emergency Services, the Guidelines and the Proprietor's Facility Risk Management Plan.

Fire safety provisions shall be provided to comply with requirements of the National Construction Code and the Department of Health's Guidelines and may include but not be limited to:

- Provision of materials and methods of construction complying with codes and regulations.
- Compartmentation of the building(s) into fire and smoke control Compartments.
- Provision of fire egress arrangements (suitable for the nature of the facility and occupant/patient).
- Provision of automatic fire detection and alarm system.
- Provision of Emergency Warning and Intercommunication (EWIS).
- Storage arrangements for firefighting water.
- Firefighting water pressure boosting arrangements.
- Provision of smoke clearing ventilation.
- Smoke mode controls for ventilation plant.
- Provision of escape route air pressurisation.
- Provision of emergency warning and information equipment.
- Provision of fire hydrant equipment.
- Provision of automatic fire extinguishing and suppression systems.
- Provision of first attack firefighting equipment, including fire hose reels, portable fire extinguishers and fire blankets.
- Provision of escape/evacuation diagrams.
- Provision of a National Construction Code Compliance Report prepared by the building Surveyor, to be kept at the facility at all times.
- Provision of fire/smoke compartmentation drawings prepared by the architect to be kept at the facility at all times.

The hospitality industry encompasses four main sectors: restaurants, hotels, recreation, and tourism, and has many subsections. But they have something in common. They all use large, often complex buildings and involve hundreds of people. That is the unique challenge about fire protection for the hospitality industry. It is vital to make sure people can evacuate safely with adequate measures in place.

The hospitality industry offers many unique challenges for fire protection. As with most public-accessible business, life safety is the primary concern.

It is essential that all fire protection systems be operating properly and efficiently. Insurance providers often play an important part in driving fire protection standards to satisfy both life safety and property protection needs.

The hospitality sector faces many challenges when it comes to fire protection and the safety of guests and staff. Venues are required to safely manage a daily rotation of new guests.

Additional risks are busy commercial kitchens, casual staff and people with disabilities.

Commercial kitchens are in constant use - grease and dirt can accumulate on the surfaces of extractor fans and ventilation ducts. Many fires which start in the kitchen are caused by inadequate maintenance and cleaning. A build-up of grease is not only an environmental health hazard, it is a major fire risk.

Just like any structure, hotels are at risk for fires - but there are specific aspects that make their fire prevention systems and plans more complex. First, hotels have a high occupancy load due to the many rooms and numerous guests that could spend any given night. In addition, unlike office spaces or apartment complexes, guests are unfamiliar with the building and viable escape routes.

New hotels are required to have audible alarms loud enough to wake sleeping guests: alarms near the bed head should be around 75dB. It is vital that guests wake up immediately during a fire to provide the maximum amount of time to escape. Consideration should be given to using more than one form of fire alarm system, e.g. visual alarms, to alert people with hearing disabilities.

A hospitality venue can typically have fire sprinklers and pumps, fire alarm, fire extinguishers, emergency lighting, hood suppression and backflow protection. They also include special protection devices such as fire dampers, fire doors and even elevator fire protection systems.

There is a strong need to keep each system functioning properly and to avoid false alarms. There are typically requirements and restrictions on when the audible systems can be activated for testing. Guest inconvenience is not an option nor is any unplanned business interruption.

It is becoming increasingly more common for fire detection systems to be integrated, not only with extinguishing systems but also emergency lighting, voice alarm and mass-notification systems as well as building management systems – to control smoke extraction, fire doors and lifts in the course of any potentially life-threatening event.

Such integrated systems will automatically provide clear, step-by-step instructions for what to do, with whom to make contact, where to seek escape and where to assemble. All relevant alarm or lighting systems will be triggered automatically, so that every party involved knows exactly what to do next.

Fire safety is imperative to protect your guests and staff. It is essential to install the correct fire safety equipment throughout the building. In addition, staff must be knowledgeable and trained with emergency response protocols.

Fire safety in industrial buildings is a particularly big challenge since, usually, these types of buildings have a high fire load. In addition to the merchandise, installations contain elements that spur on the spread of flames, like plastic materials, cardboard or wood, among others. To minimise this risk, warehouses and other industrial buildings must have fire prevention, detection and suppression systems.

The warehouse is the key element in the supply chain of a business. For this reason, it is imperative to be vigilant and keep it in top shape, to eliminate risks to personnel, to minimise damage to goods and to avoid hold ups in customer service.

Interruptions in services or the total or partial destruction of a warehouse can lead to enormous losses, both in materials and money, in addition to the damage to a company's corporate image.

Passive and active protective measures are essential to fit out installations with a proper level of safety for both personnel and the goods being stored, minimise losses and keep a business operational.

The primary active protection fire safety systems in industrial buildings are:

Manual systems These systems are usually recommended to contain small outbreaks of fire or, if a fire is already spreading, to aid the other intervening equipment. Portable fire extinguishers, fire hoses and hydrants are first response items to deal with a fire and are recommended for small, low-risk buildings. In large sized warehouses or those with a larger fire load, these items are used in addition to the automatic fire equipment.

Automatic fire alarm and detection systems Locating a fire when it first ignites is crucial to minimise fire damage. There are devices that can detect a fire via the presence of smoke, flames or rising temperatures.

Audible signals are provided to alert staff that a fire has occurred, and evacuation of the premises should commence. Visual warning is also provided in high noise areas.

Automatic sprinkler systems are most commonly used in storage buildings. They consist of a network of pressurised water pipes that are equipped with discharge nozzles (sprinklers) appropriately distributed throughout the warehouse, for example, inside the racks. Sprinkler nozzles are covered by a heat-sensitive material that keeps them closed when they are not in use.

Some industrial buildings contain unique features, either for the stored goods, or due to environmental or constructive conditions, which require the inclusion of customised firefighting and safety systems. For instance, in warehouses with combustible or flammable liquid products it is usual to incorporate foam fire safety systems. Typically, water-foam deluge valves or foam-forming liquid injectors are installed in the sprinkler system.

Smoke extraction systems are as vital as the automatic firefighting elements. The smoke and toxic gases from a fire rise to the ceiling of the building, where they accumulate and thicken, filling the area, until they reach where people are (which complicates evacuation measures). Smoke extraction combined with the intervention of automatic sprinklers will help keep the temperature of these gases below levels that would otherwise damage the structure.

Fire can have a devastating effect on a business and poses a serious risk to the safety and welfare of building occupants. Business interruption because of damage to expensive equipment and lost data can be difficult to recover from.

It is important that business owners understand the consequences and invest in appropriate fire protection solutions.

The Western Australia Building Commission has provided guidance on fire safety in apartment buildings. A fire safety system is one or any combination of the methods used in a building to -

- warn people of an emergency;
- provide for safe evacuation;
- restrict the spread of fire;
- control a fire,

and includes both active and passive systems.

Active fire safety measures include fire extinguishers and early warning and detection systems to assist in case of a fire. These safety measures could be either automatic or for manual use (such as fire hose reels, fire sprinklers, smoke detection and alarm systems).

Passive fire safety measures include fire doors, fire walls and other fire rated and non-combustible construction to contain fire or restrict fire spread and provide protection to allow time for escape.

Good housekeeping, effective maintenance and routine servicing are paramount in ensuring the building occupants are safe in the event of a fire. This means ensuring both active and passive fire safety measures are not compromised and are always in good working order. It is the responsibility of all owners and occupants to ensure good housekeeping and effective building management is met.

Building legislation in Western Australia requires owners of Class 2 to Class 9 buildings (which includes residential apartments) to ensure the building's safety measures are maintained. This is to ensure that safety systems remain capable of performing to a standard not less than they were originally required and commissioned to achieve.

Under Regulation 48A of the Building Regulations 2012, safety measures are required to be maintained in accordance with relevant building standards:

The Building Commission considers the adoption of Australian Standard AS1851-2012 Routine service of fire protection systems and equipment as good practice and a means for owners to ensure fire safety measures are serviced at regular frequencies to demonstrate suitable operation, and rectified or repaired if necessary to meet their regulatory obligation on maintenance.

A log book for recording the routine servicing of fire protection systems and equipment will assist with good management in meeting maintenance obligations.

Multiple sleeping occupants is the most important risk to consider when designing a fire protection solution for residential buildings.

It is essential that smoke detectors and a compliant warning system is provided to allow sleepers enough time to wake and evacuate before the fire becomes too intense.

Building owners and occupiers should be familiar with the evacuation procedures in their building and importantly, what to do in case of a fire. Emergency planning for evacuation, in the event of a fire, will differ depending on the merits of each building.

All refurbishment work is required to comply with the BCA and must not impact on the fire safety of the occupants of the existing building. Some proposed refurbishment, which may appear minor in nature, may have a significant impact on fire safety.

Any plans to upgrade an existing building must have the safety of occupants as the first priority – over and above any aesthetic or cost considerations.

Consult with the relevant local government permit authority before starting any building work to determine whether the work requires a building permit.

It is recognised that both life safety and property protection are of importance in shopping centre buildings. A large fire in these buildings may not only present a major threat to life and may result in significant direct property losses, but more importantly, an ongoing loss of sales revenue through interruptions and delays to the provision of goods and services.

Fire risk is considered the major catastrophic risk for shopping centres and malls. They have large numbers of people passing through, especially at weekends and other times such as during festive seasons. There are the people who work for the tenants that could be in the hundreds depending on the size of the centre. There are also the service providers such as cleaning and security contractors who are also part of the centre workforce. Centre management has the responsibility of fire risk management and to make sure this risk is minimised.

The majority of retail fires are started by electrical faults or arson. In the case of electrical faults, these were often associated with PVC covered wiring and electrical devices within the ceiling space, display case areas or shop facades and faults from appliances. Several fires were caused by welding work during renovation.

The Australian Building Codes Board has issued a report on life safety and property protection in shopping centres. The report's recommendations are;

Fire resistance and compartmentation - The building structure when should have sufficient fire resistance to allow the movement of the occupants to a safe place. The fire resistance required should therefore relate directly to the time it takes for the occupants to move to a safe place. The areas within a shopping centre capable of having a significant fire are the specialty and major stores.

Evacuation - The presence of an Evacuation Management Plan and associated training is of fundamental importance. The training of wardens and evacuation drills should be sufficient to allow them to have a positive impact on any evacuation.

Emergency vehicle access - It is important that the fire brigade has access to major entrances of the building and unobstructed use of the fire hydrants.

Firefighting provisions - The intervention of the occupants is important. Fire extinguishers are best provided in specialty shops and major stores. For a very large building, it may be appropriate to have some staff trained in firefighting beyond the use of hose reels and to provide in-house booster pumps and specialist hose lines that could be fitted to hydrants.

Smoke control - As far as smoke management of major stores is concerned it is recommended that the exits comply with the current deemed to satisfy requirements of the BCA with the exception that the entrance to the mall also be considered as an exit. Major stores should be designed to allow evacuation in the event of a fire.

Sprinklers - Sprinklers associated with major stores should be separately valved to those associated with specialty shop areas and each valve should relate to only one level in the building. Any reduction in sprinkler zone size for specialty shop areas is to be encouraged provided that any subsidiary valves are monitored and positioned in appropriate locations.

Fires create panic amongst retailers and the general public. They can cause damage to property, equipment and stock, and can result in lengthy and expensive downtime while repairs and rebuilding take place.

It is important that fire safety systems are installed and properly maintained and that emergency plans are in place and practiced.

High levels of fire safety will only be achieved in retail buildings if all fire-safety systems are properly commissioned and managed throughout the life of the building.

To understand why there is a need for special hazard fire protection systems it is important to understand what a 'special hazard' is.

Special hazards can be defined as, but not limited to:

- Any area containing equipment or processes of exceptionally high value.

- Any area containing unique or irreplaceable assets (museums, archives, art galleries, records storage).

- Any area or process where the revenue produced, or its function is of greater value than the equipment itself.

Special hazards are everywhere and are very wide ranging. A special hazard can be a building, an area, a room or a piece of equipment. Some examples of places where you would find special hazards include telecommunications, power generation, manufacturing and testing facilities, machinery spaces, and healthcare facilities. These areas are exceptionally challenging from a fire protection standpoint.

Special hazard fire protection systems are designed to:

- Quickly detect an incipient fire or heat condition.

- Suppress fires when sprinklers are not appropriate as the first and only means of fire protection.

- Protect people.

- Mitigate business interruption.

- Limit the loss of assets, information and revenue.

Special hazard fire protection systems include detection and control coupled with a fire suppression system.

Some common fire suppression agents used in these systems include;

Clean Agents	Inert Gases	Water Mist
Dry Chemical	Carbon Dioxide	Foam

Room integrity testing, which is also known as door fan testing, is a simple way to measure the gaseous leakage of an enclosure. This enables a general contractor or building owner to ensure the gaseous fire suppression agent is retained in and restricted to the protected room so it can quickly and effectively extinguish a fire to protect employees, equipment and facilities.

Special hazards can be defined as any area containing equipment, processes or stock of exceptionally high value, contain unique or irreplaceable assets or any area or process where the revenue produced is of greater value than the equipment itself.

A special hazard can be a building, an area, a room or a piece of equipment. Fire protection systems generally have very sensitive smoke detectors and a suppression system that is either water or a gaseous agent.

Traditional fire detectors do not work effectively in rooms that have a large volume of airflow or high ceilings, because they require a significant amount of heat or smoke to be triggered. This places employees, equipment and facilities at greater risk. An alternative is to install air sampling smoke detectors that draw a sample of the environment to a very sensitive optical detector.

Explosion protection is used to protect hazardous environments from massive explosions that are likely to occur in chemical and refining plants, bulk solids handling facilities and pharmaceutical manufacturing. Dust explosions can occur during the conveying, processing, pulverizing and storage of a wide range of solid materials that form a fine dust particulate, such as corn, flour and grain.

Special hazards fire protection requires uniquely trained and qualified personnel to design, install, service, repair and maintain these systems.

The 2020 Western Australia strata laws require all Council of Owners to act honestly, with loyalty and in good faith. Selecting the right contractor to look after a building's fire systems is an important decision.

Owners have a duty of care to ensure building services are always operating effectively and are compliant. A significant portion of a Strata Company's budget is allocated to repairs and maintenance. To gain greater control of the budget the Council of Owners should nominate and train a responsible person to oversee all matters relating to the fire systems, even if a Strata Manager coordinates the work. The Strata Manager or responsible person should understand what tests are required and when they fall due.

Most fire service companies only allow to carry out routine maintenance that is required by Australian Standard 1851 to be done in yearly cycles. For example, fire detection systems are required to undergo a series of tests every month, every six months more tests are done and then once a year a more complex test is required. Fire sprinkler systems have a similar requirement.

Australian Standard 1851 also requires some fire systems to have long term tests to be completed – 5, 10, 25 and 30 years. The service company should provide notification when the additional tests are required, however, this can be difficult if they do not know the full service history of the building.

It is important for the Strata Company to retain all records, should a fire incident occur the insurance company will review the service records, if all the required inspections and maintenance has not been completed then it is likely a claim will be denied.

Only reputable companies should be employed to maintain your fire systems. Modern systems are complex in design; therefore, only engage companies that have knowledge about the components, configuration and performance specifications of your building.

Fire can have a devastating effect on a structure and is a serious risk to the safety and welfare of building occupants. Property loss and damage can result in lengthy disruption while repairs and rebuilding take place.

All strata-titled properties including residential buildings are required to carry out a fire safety inspection of the common property. This should be carried out at least annually to identify issues relating to the fire services within the building.

A responsible person should implement an education program for all occupants of the premises to make them aware of the building's systems, how they operate and what the common faults are. This will ensure faults are investigated and quickly fixed. It is important to ensure procedures are in place for managing contractors, maintenance workers and other visitors. They should be aware of the building's systems and who is responsible for managing the systems during disruptive work e.g. isolating the fire panel if dust is likely to activate the smoke detectors.

The Western Australian Building Commission urges building owners and managers to review the fire safety of existing buildings to confirm that previous building work has not left building occupants vulnerable in the event of a fire. An appropriately qualified registered building surveyor, with relevant knowledge of the Building Code of Australia, can coordinate a fire safety assessment of the existing building.

Complex buildings with fire safety performance solutions, and older high rise buildings that may have had a number of ad hoc alterations throughout its life, may also require review by a suitably qualified fire safety engineer.

ENVIRONMENT COMMITMENT

Westside Fire Services activities will be carried out so as to protect the health of employees, trainees, customers, contractors, and community while paying proper regards to the protection and management of the environment.

We will take appropriate actions to protect air, water, animal and plant life from adverse effects of our activities, and to minimise any nuisance which may arise. Our personnel are trained and instructed to understand and comply with project specific environmental protection requirements.

SAFETY COMMITMENT

Westside Fire Services makes safety our number one priority. Recognising that safety is a state of mind, we ensure every employee develops and maintains a responsible, self-disciplined attitude to their own and others safety.

We practice:

- **Anticipating problems before they occur**
- **Being alert & analysing our working environment**
- **A disciplined approach of taking responsibility for our actions.**

We continually monitor and evaluate procedures, equipment and operations to ensure our practices are the best methods currently available.

Our management team recognises its responsibility to provide a safe workplace and systems. We ensure all our staff are provided with the required information, resources and training.

NO EXCUSES
TOWARDS ➡ ZERO HARM

ROUTINE SERVICE FREQUENCIES	Monthly	Three Monthly	Six Monthly	Yearly	Five Yearly	Ten Yearly	Twenty Five Yearly	Thirty Yearly
Fire Detection	✓		✓	✓	✓			
Occupant Warning	✓			✓	✓			
Exit & Emergency Lighting			✓	✓				
Fire Extinguishers			✓	✓	✓			
Fire Doors		✓ Horizontal Sliding Doors	✓	✓				
Fire Hose Reels			✓	✓				
Fire Hydrants	✓ Where Pumpsets Fitted		✓	✓	✓			
Fire Pumps	✓		✓	✓	✓			
Gas Suppression	✓		✓	✓		✓		
Sprinkler Systems	✓		✓	✓	✓	✓	✓	✓

Design
We design solutions, tailored to your building.

Installation
Our installation teams are focused on delivering on time and on budget projects.

Service & Maintenance
We offer regular servicing and maintenance to ensure that your systems are working at their optimum level.

Emergency Call Out
The Emergency Call Out Service ensures that you are covered 24 hours, 7 days a week for fault and emergency.

Fire Safety Training
We deliver training courses to ensure your team has the knowledge to act competently during an emergency.

FPA AUSTRALIA — GOLD MEMBER Fire Protection Association Australia

strata community association WA member

neca Member

NO EXCUSES TOWARDS ➡ ZERO HARM

FREE advice and site inspections.
Contact us now for assistance with your next project or to learn more about our solutions.

Visit us at
Unit 1/7 Montgomery Way, Malaga, WA 6090

Mail us at
PO Box 2326 Malaga, WA 6944

Email us at
inquiries@westside.com.au

24 hour support
9248 4824

westside.com.au