BOWSERS®
FIRE PROTECTION EXPERTS
SINCE 1968

The Importance of Passive Fire Protection Services

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Contents

Why is Passive Fire Protection Important?

Passive fire protection measures help limit the spread of smoke and fire in buildings, potentially saving lives.

If a fire starts, passive fire protection measures will help contain the fire and smoke within the originating fire compartment of the building. Containing the fire at its point of origin will allow occupants to safely evacuate the area. Passive fire protection slows down the spread of fire giving occupants more time to evacuate and preserves a building's integrity, making fire-fighting easier and safer.

Structural fire protection and compartmentation are the cornerstones of passive fire protection. Incorporating passive fire containment measures into the fabric of the building will limit the spread and possible damaging effects from the fire.

Periodic inspections and maintenance of your passive fire protection systems ensures proper performance when required. Maintenance procedures are outlined in the ***Australian Standard, AS 1851–2012: Routine Service of Fire Protection Systems and Equipment***.

Benefits of Proper Passive Fire Protection;

- Enhances occupant safety
- Restricts fire and smoke spread
- Preserves structural integrity
- Protects valuable assets
- Ensures regulatory compliance

About Bowsers

Working in the Passive Fire Protection industry since 1968, Bowsers is a leading passive fire rating contractor operating nationally in the building, industrial, infrastructure and bushfire protection sectors.

INSTALLATION

- Fire and Smoke Dampers
- Fire Seals
- Blast Walls
- Lightweight Construction
- Bushfire Protection

CONSULTING

- Technical Advice
- Compliance Audits
- Fire Safety Statements
- Certification

Bowsers Accreditation & Licences:

- FPAS – Fire Protection Association Accreditation Scheme
- QBCC – Queensland Building and Construction Commission
- Greencap CM3
- Range of Fire Rated Products used in the industry

Why use Bowsers?

- Bowsers is accredited with the Fire Protection Association Accreditation Scheme (FPAS) and the Queensland Building and Construction Commission (QBCC) and is an accredited applicator of a range of approved products to the relevant Australian Standards.
- Bowsers is independently risk accredited by Greencap Cm3.
- Bowsers is an accredited applicator for a range of fire rated products used in the industry.

55+
years in the Passive Fire Protection industry

25+
Employees with 10 years average service

90%
Repeat Clients

100%
of our work is certified to the relevant Building Codes and Standards

1500+
projects and audits successfully completed annually

Installation of Fire and Smoke Dampers

Whenever an air conditioning duct passes through a fire (or smoke) barrier, it must have a device installed at the point of penetration to prevent the passage of fire (or smoke) through the duct from one side to the other. These devices are called fire (or smoke) dampers. They are essentially “gates” within the ductwork that are left open during the normal operation of the air conditioning system.

However, upon activation, in the event of a fire, the damper closes to prevent the passage of fire and smoke between compartments. Like any fire protection measure, these devices should be installed and maintained by specialist passive fire protection contractors. Their initial installation must be certified to comply with the National Construction Code (formerly the Building Code of Australia) and various Australian Standards.

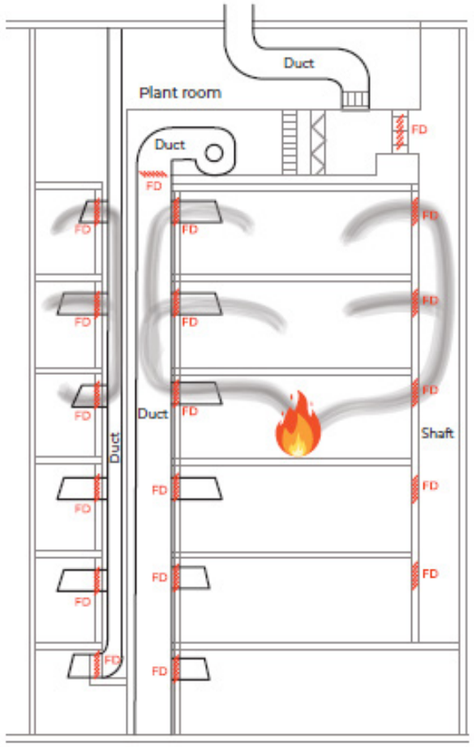
This certification is vital as it forms part of the documentation required to enable the building to be occupied. The installation of the fire / smoke dampers requires co-ordination between the contractors installing the ductwork and the ones building the barrier.

The penetration through which the ductwork passes, must be constructed in a very specific manner. The damper must be correctly affixed within that penetration. Then the ductwork must be correctly connected to the damper using a special “breakaway joint”. This joint is a special connection that permits the ductwork to collapse in the event of a fire, without pulling the fire damper out of the penetration.

Once the fire damper is correctly installed, access must be provided to enable it to be routinely inspected and serviced. Typically, an access panel is installed within the ductwork to enable this.

Fire and smoke dampers must be serviced to ensure their correct operation in the event of a fire.

In Australia, the current standard prescribing the maintenance procedure is AS 1851-2012.



Routine service of fire protection systems and equipment

The maintenance procedure assesses the installation of the fire damper, ensures there is suitable access to maintain it and confirms that it has not been damaged or deteriorated to a point where it cannot function.

As a minimum, 20% of a building's fire (and smoke) dampers must be inspected annually so that over the course of 5 years, they have all been assessed. It is vital this annual maintenance inspection be conducted by an experienced contractor able to interpret all the requirements of the National Construction Code, Australian Standards and product manufacturer’s guidelines.

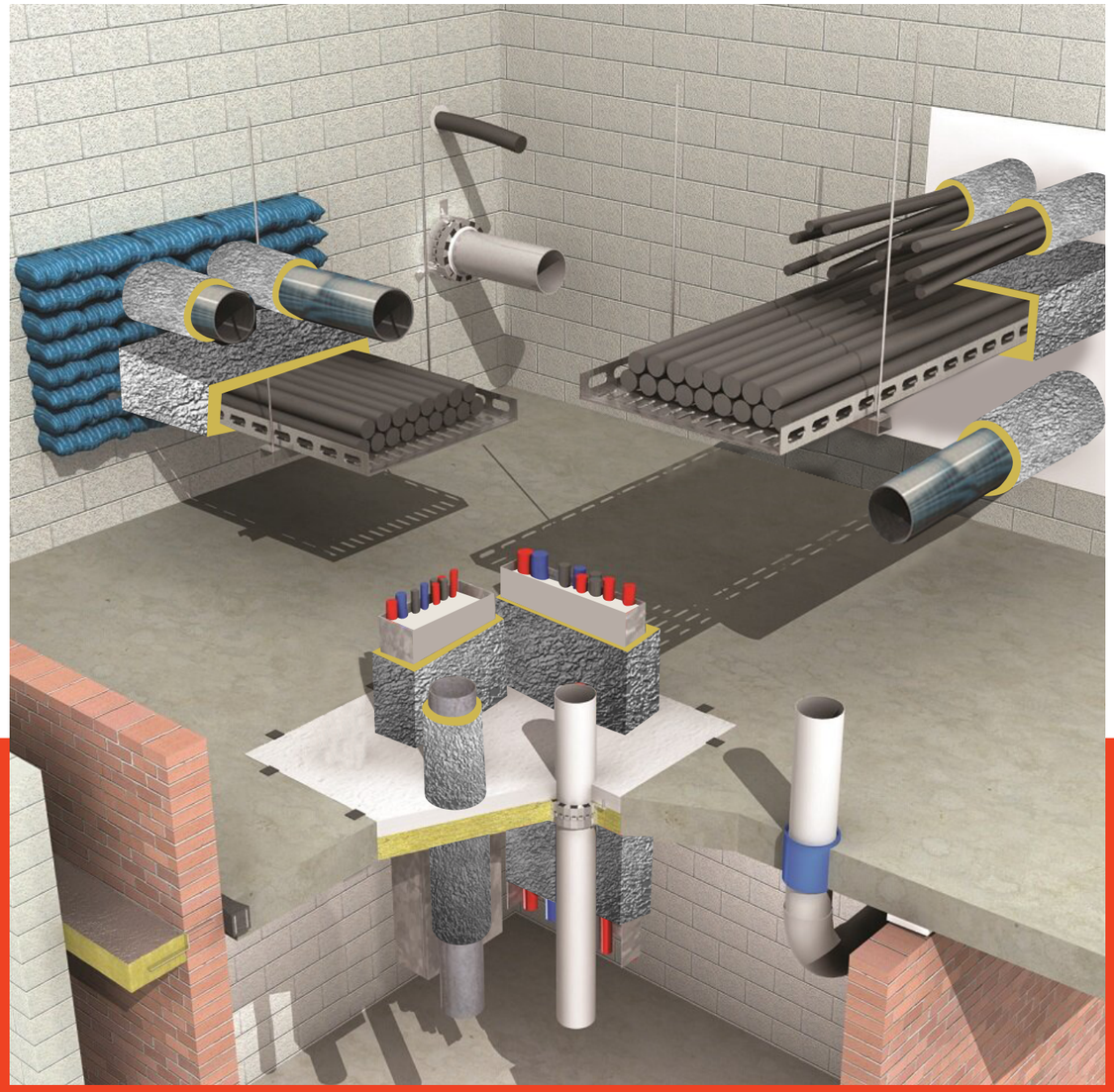
Fire Seals

Fire seals are used to protect openings in fire-resisting components of buildings and are extremely important in restricting the spread of fire throughout the property.

Fire seals are best defined as systems installed to openings that prevent fire, smoke and heat from passing through the building. Their main goal is to protect building occupants and can also be used to protect the structure of the property, preserve its infrastructure and safeguard adjacent properties.

Bowsers specialises in the fire sealing of services which penetrate fire rated elements. These include hydraulic and electrical services. Risk occurs when these services pass through the fire rated elements without adequate fire protection, potentially exposing the building to the spread of fire between fire compartments.

Building compliance and certification is only valid when the choice of passive fire sealing system matches the tested prototype.

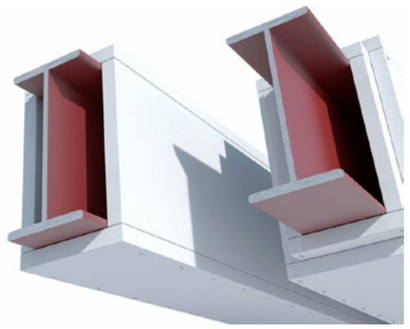


PROMATECT® XS

PROMATECT® XS is a high performing fire protective board, specially designed for the fire protection of structural steel elements. Combining high fire protection performance and easy installation, Bowsers offers PROMATECT® XS Next generation hybrid board technology that has only just been released in Australia.

The benefits are twofold including:

- Low board thickness needed for any given fire protection.
- Easy installation with staple fixings and no glue of filler.
- Suitable for semi-exposed external conditions.



Bushfire Protection

Bowsers provides bushfire protection systems for homes and other structures located in bushfire zones classified as “Flame Zone” areas.

Following the devastating Victorian Black Saturday bushfire fires in 2009 and the subsequent Victorian Royal Commission, the new Australian Standard AS3959 -2009 was created to effect changes to planning regimes for greater bushfire protection.

Bowsers, being the exclusive distributer of Promat’s Bushfire Roof and Wall Systems in NSW, has successfully worked with home owners, roofing contractors, and builders over the past 10 years to provide BAL-FZ (flame zone) compliant solutions. These solutions are tested to AS1530.8.2 (2007) and meet the requirements of the Rural Fire Service to protect property against the direct impact of a bushfire.

Blast Walls

Bowsers is a recognised approved installer of DURASTEEL® systems in Australia.

DURASTEEL® offers blast protection of up to 200 kPa and Fire Resistance Levels (FRLs) of up to 4 hours. It is suitable for use in hydrocarbon fire applications as well as typical cellulosic (building) fire applications; combining, strength, impact resistance and durability with exceptional fire resistance.

Installed as mechanical ventilation ductwork, walls, or ceilings, DURASTEEL® systems have been successfully used on rail and metro projects. Other uses include military facilities, commercial buildings, substations, pharmaceutical and petrochemical plants.

Lightweight Construction

Lightweight construction is used to describe the application of intumescent coatings, fire spray or the construction of fire rated bulkheads and enclosures. It can also be used to describe fire rated walls and ceilings constructed from plasterboard or similar materials.

Bowsers uses fire rated boards specially designed for use in lightweight construction applications.

Typically, we construct fire rated enclosures around services. There are many products suitable for this use and Bowsers’ expert knowledge ensures a fully compliant and certified system is installed.

Consulting

Technical Advice:

Bowsers can provide specialist advice in the early stages of design to clients. This includes technical advice, buildability, costing and programming advice to enable optimal compliant solutions to be developed for builders and building services work as well as building owners. We work closely with Building Certifiers and Fire Engineers in order to optimise strategies for all types of assets.

Fire Safety Statements and Certification:

Annual Fire Safety inspections are required for multi-unit residential developments, commercial or industrial buildings. These statements need to be submitted to Councils or relevant fire authorities. They ensure the fire safety systems are maintained correctly and will operate as intended. Bowsers is one of the few companies in Australia with a dedicated team of highly trained and experienced passive fire auditors.

Compliance Audits:

Bowsers specialises in the annual maintenance inspection and assessment of passive fire systems. Clients benefit from the development of passive fire maintenance registers that can be used for maintenance planning and asset management.

Current service agreements cover the following sectors:

- Building
- Industrial
- Infrastructure

THE OASIS SHOPPING CENTRE, FIRE DAMPERS

Case Study: The Oasis Shopping Centre, Fire Dampers

SECTOR:
Building (Shopping Centre)

CLIENT:
Precise Air Group Pty Ltd

PROJECT COMPLETION:
Late 2024

ADDRESS:
75 Surfers Parade
Broadbeach QLD

PROJECT OVERVIEW:

Bowsers was commissioned to conduct a comprehensive fire damper audit to ensure the effective maintenance of its Passive Fire Protection Services. The inspection revealed minor corrosion in specific areas and identified instances where some fire dampers did not fully comply with regulatory standards.

SERVICES OFFERED:

This comprehensive task involved upgrading over 100 existing dampers with new mechanical and intumescent fire dampers, as well as addressing non-compliant penetrations, and decommissioning dampers connected to obsolete equipment.

Installation challenges arose from the difficult-to-reach fire dampers, requiring scaffolding and scissor lifts for access. The location and height of many dampers posed safety challenges, necessitated longer working hours, and increased both time and labour requirements. Moreover, some damper installations were in tenant-occupied spaces, demanding careful scheduling, regular communication and coordination to minimise disruptions.

To overcome these challenges, the Bowsers team carefully planned the sequencing of work, incorporated additional safety protocols and used more specialised equipment for easier access to these difficult-to-reach areas. Detailed pre-planning and continuous coordination was critical. Bowsers employed a strategic approach to scheduling, ensuring work in sensitive areas such as restaurants took place late in the evening (after hours), minimising disruption to daily operations.

The client, along with shopping centre management, expressed high satisfaction with Bowsers' expert guidance and tailored solutions. The project was completed on schedule and within budget, thanks to Bowsers' effective communication, meticulous attention to detail, and unwavering professionalism. Their extensive expertise in managing fire and smoke damper systems in complex, high-traffic environments was instrumental in ensuring the successful outcome of the project.

SHERATON GRAND MIRAGE, GOLD COAST

Case Study: Sheraton Grand Mirage, Gold Coast

SECTOR:
Building (hotels)

CLIENT:
Airmaster Australia

PROJECT COMPLETION:
Ongoing

VALUE:
$250,000+

ADDRESS:
Main Beach, Gold Coast

PROJECT OVERVIEW:

Following the successful upgrade of fire dampers across 284 rooms, 11 suites, service areas, and resort corridors at the 5-star Sheraton Grand Mirage, Gold Coast, completed over a 26-week period, Bowers has been re-commissioned to provide ongoing inspections and maintenance services.

SERVICES OFFERED:

After completing the initial upgrade, Bowers has continued to deliver periodic inspections and essential maintenance. These services ensure the continued compliance and optimal functionality of the fire damper systems.

Given that the resort maintains occupancy rates exceeding 80%, meticulous planning is required to ensure that maintenance activities do not disrupt guests or staff.

Bowers implemented a comprehensive planning process and worked in close coordination with the resort's reservation teams to schedule maintenance tasks effectively. Construction activities were conducted during designated hours to minimise noise and disruption, ensuring an uninterrupted experience for guests.

Bowers' technical expertise, effective communication, and ability to operate within live hotel environments have earned the company continued trust for ongoing inspections and maintenance. As a result, the fire damper systems remain fully compliant and continue to perform at their best.

BLAST WALL INSTALLATION AT TEYS AUSTRALIA, ROCKHAMPTON

Case Study: Teys Australia, Rockhampton

SECTOR:
Industrial (Meat Processing)

CLIENT:
Teys Australia, Rockhampton

PROJECT COMPLETION:
June 2017

VALUE:
$239,000

ADDRESS:
Lakes Creek Road,
North Rockhampton

PROJECT OVERVIEW:

Following an annual insurance inspection, a Teys Rockhampton transformer bay which supplies power to the entire site, was identified as having no fire or blast measures installed. This posed a potential risk of a transformer chain reaction fire event, which could result in production loss and damage.

SERVICES OFFERED:

Scope of works included the supply, installation, and certification of 13 insulated Durasteel® partitions located between each of the transformers and the adjacent building. Each partition providing a 3-hour fire resistance level (FRL) and 2kPA blast rating.

Given the Queensland location, Bowsers needed to source and coordinate local suppliers and contractors. Pre-operation site inspections and pre-planning with the client, multiple contractors, and suppliers was critical to project success. Bowsers worked closely with a local steel fabricator and crane operator to prefabricate all partition framing and bracing. This enabled finished frames to be craned safely into position and firmly anchored in place. This construction approach effectively halved the amount of time installing on site and the associated power outages / isolations required.

The project was completed 2 days ahead of schedule and the quality finish Bowsers provided, exceeded client expectations. Since 2017, Bowsers has completed further installations of insulated Durasteel® partitions to transformer bay areas at Teys Rockhampton and Biloela sites.

ATURA HOTEL, BLACKTOWN, NSW

Case Study: Atura Hotel, Fire & Smoke Dampers

SECTOR:
Building / Hotels

CLIENT:
Atura Blacktown

PROJECT COMPLETION:
December 2024

VALUE:
$280,000+

ADDRESS:
32 Cricketers Arms Road
Prospect NSW

PROJECT OVERVIEW:

Atura Hotel Blacktown, known for its contemporary design and innovative approach, has been a key player in Sydney's mid-segment hotel market since its grand opening. In line with its commitment to safety and compliance, the hotel's management engaged Bowsers to enhance its fire and smoke damper systems.

SERVICES OFFERED:

The project commenced with a pilot phase, involving fire and smoke damper repairs and installations in three guest rooms and a back-of-house area. Following the success of this initial phase, the scope was expanded to include a full-scale rollout across all 122 rooms in the hotel.

Given that Atura Hotel Blacktown is a high-traffic hospitality venue, it was crucial that all work be completed in stages, to minimise disruptions to hotel operations and guests.

Building on insights gained from the pilot phase, Bowsers refined its installation methodology to align with the hotel's operational needs. This strategic approach ensured a smooth and efficient rollout with minimal impact on daily activities. Bowsers also ensured full compliance with the relevant Building Codes and Australian Standards by replacing all fire dampers specified in the project tender.

The project was successfully completed on time and within budget, exceeding the expectations of hotel management. Bowsers' expertise, clear communication, and experience working in fully operational hotels contributed to a seamless execution. As a result of this successful collaboration, Bowsers has been entrusted with additional audit and inspection projects across other AHL-managed properties.

THE ASTON, SYDNEY, NSW

Case Study: The Aston, Fire Dampers

SECTOR:
Residential / Retail

CLIENT:
MostynCopper

PROJECT COMPLETION:
November 2024

VALUE:
$650,000

ADDRESS:
1 Hosking Place, Sydney NSW

PROJECT OVERVIEW:

Discretely situated off Martin Place, The Aston is a 28-story mixed-use development comprising retail units and residential apartments. Bowsers, a trusted leader in fire damper installation, was engaged by MostynCopper to address compliance issues after a previous contractor installed non-compliant fire dampers in nearly 50% of the building's units.

SERVICES OFFERED:

Following an initial audit of two units, Bowsers identified that over 80 dampers required either replacement (70%) or repair (30%) across levels 8 and above to ensure full compliance with fire safety regulations.

Recognising owners and tenants had already endured significant disruptions from previous substandard work, Bowsers approached the project with heightened sensitivity and precision. Rectifying non-compliant installations often proves more complex than upgrading outdated fire dampers. Seamless coordination with plumbing and sprinkler system contractors was essential to maintaining workflow efficiency and minimising resident inconvenience.

Bowsers executed a carefully structured plan that ensured seamless coordination with both the client's schedule and other essential trades, including plumbing and sprinkler contractors. This strategic approach streamlined the project's execution while maintaining the highest quality and safety standards. The result was a fully compliant fire damper system that met all regulatory requirements.

The project was successfully completed on time and within budget, achieving full compliance with Australian Standards. MostynCopper commended Bowsers for their professionalism, efficiency, and attention to detail. By prioritising residents' concerns and implementing proactive measures, Bowsers ensured a smooth, well-managed process – delivering a safe and compliant outcome for The Aston's residents and stakeholders.

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