BOWSERS®
FIRE PROTECTION EXPERTS
SINCE 1968

The Importance of Intumescent Coatings

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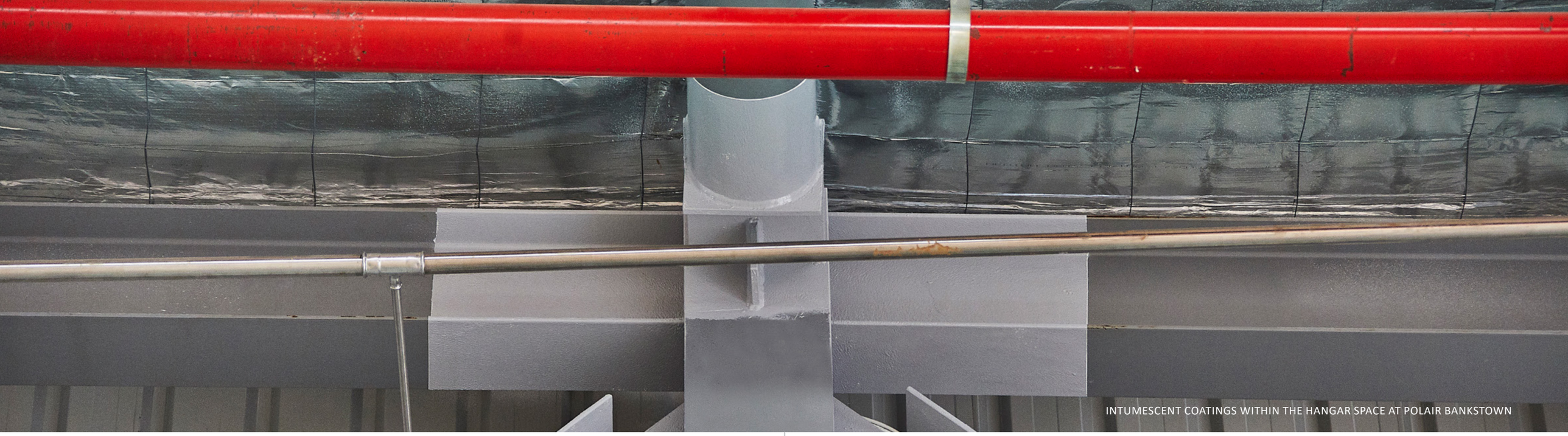


INTUMESCENT COATINGS WITHIN THE HANGAR SPACE AT POLAIR BANKSTOWN

What are Intumescent Coatings?

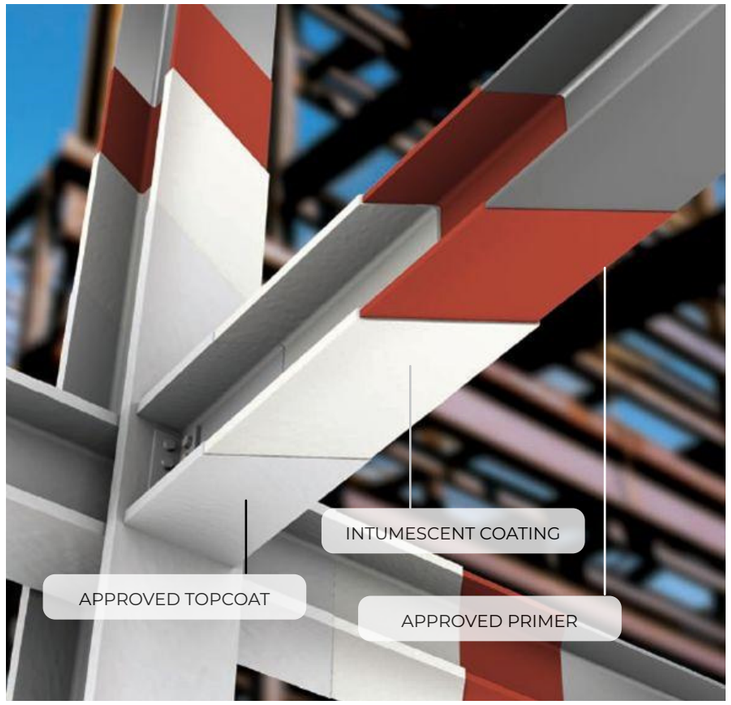
Intumescent Coatings are used in construction as a passive fire resistance measure, to protect and preserve the stability and structure of the building in the event of a fire.

Intumescent Coating systems generally have 3 components.

- A primer
- The Intumescent Coating
- A sealer / topcoat

Intumescent Coatings offer a protective layer which swells under heat (with or without the application of water) to many times its' original thickness in a controlled manner and forms an insulation layer on the surface.

This protective insulating layer over the substrate helps reduce the risk of a possible structural collapse of the building, which can occur if load bearing steel reaches a critical state.



The Importance of Intumescent Coatings

Intumescent Coatings are commonly applied to the steel elements of a building, such as beams and columns to preserve the structure's stability and prevent its collapse in the event of a fire.

This coating can provide protection up to 120 minutes, providing time for the safe evacuation of the building's occupants and for fire fighters to save the building.

This product is a good solution to achieve an attractive surface finish and is typically used to easily cover complex shapes, giving a finish that can be integrated into the architectural fabric of a building. More and more architects are specifying Intumescent Coatings for fire protection and as an architectural design feature.

Intumescent Coatings for structural steel are a superior, long lasting and environmentally friendly method of providing fire rating. They are cost effective and can be rapidly applied in situ onsite whilst other trades are completing their work.

The application of Intumescent Coatings can be seamlessly incorporated into a construction program leading to efficient integration of activities on site.

Why use Bowsers?

Bowsers is a specialist applicator of Intumescent Coatings and has been working as a passive fire rating contractor for over 50 years. Bowsers has highly skilled applicators and carries out works with a high level of supervision whilst coordinating works with other trades on site.

Most importantly, Bowsers provides certification for the application of Intumescent Coating products with fire ratings from 30 to 120 mins.

Bowsers has completed over 70 Intumescent Coatings projects. Our lengthy project portfolio and extensive experience makes us a leader in the application of Intumescent Coatings.

There are a variety of Intumescent Coating types with different properties and application methods. Bowsers' experienced team can recommend the best solution for your situation.

Bowsers is licenced with the Fire Protection Accreditation Scheme (FPAS) and is an accredited applicator of a range of approved products to the relevant Australian Standards. We are also independently accredited by Greencap Cm3.

BOWSERS IS AN ACCREDITED APPLICATOR FOR A RANGE OF FIRE RATED PRODUCTS USED IN THE INDUSTRY.

Bowsers' Services

Bowsers offers comprehensive services and delivery of Passive Fire Protection including Intumescent Coatings across various sectors.

Its offering includes:

- Intumescent Coatings
- Audits
- Compliance Reports
- Rectification of existing passive fire protection systems
- Installation of new passive fire protection systems
- Certification of installed systems
- Technical advice

> *I have over 30 years' experience in the paint and coatings industry, one of the keys to success is to work alongside clients that are experts in their field. The Bowsers team, with their experience and knowledge lead the way in successful project completion. I have assisted Bowsers on multiple Intumescent projects. Their attention to detail with following specification, along with quality assurance and record keeping is second to none.*
>
> Darren Brewer, Dulux Protective Coatings

Case Study: Advanced Manufacturing Readiness Facility

SECTOR:
Building (Commercial)

CLIENT:
Taylor Construction

PROJECT COMPLETION:
August 2024

VALUE:
$406,000

ADDRESS:
Bringelly, NSW

PROJECT OVERVIEW:

The future of manufacturing in Western Sydney has reached an exciting milestone with the completion of Bradfield City Centre's First Building. This world-class building will house Stage 1 of the Advanced Manufacturing Readiness Facility (AMRF), offering support to help businesses grow faster, reduce risks, and compete globally, while strengthening the NSW economy.

SERVICES OFFERED:

Bowsers were engaged by Taylor Construction for the application of Intumescent Coatings on 1000sqm of structural steel.

PROJECT CHALLENGES:

As a new construction project, it operated under a tight schedule, necessitating efficient work from Bowsers to keep the program on track. Notably, the Bowsers' team set a company record for the volume of intumescent paint sprayed in a single shift. Additionally, they faced challenges from inclement weather. This project required external application before the glass installation, and the decorative timber façade added complexity to the process.

SOLUTIONS OFFERED:

Bowsers addressed these challenges through meticulous planning and site preparation, utilising specialised application equipment. This approach ensured compliance with Australian Standards and resulted in a flawless finish that integrated seamlessly into the client's construction timeline.

OVERALL OUTCOME:

This project is a testament to Bowsers' professionalism and project management excellence, building on their successful collaboration with the client in previous projects. With a proven track record of over a hundred Intumescent Coatings projects, Bowsers' commitment to quality and attention to detail solidifies its position as a leading applicator of Intumescent Coatings.

Case Study: Americold

SECTOR:
Industrial

CLIENT:
Richard Crookes Constructions

PROJECT COMPLETION:
March 2025

VALUE:
$290,000

ADDRESS:
Prospect, NSW

PROJECT OVERVIEW:

Americold, a global leader in temperature-controlled warehousing and logistics, expanded its cold storage facility in Prospect, NSW, to meet growing demand. As part of the $55 million development, Richard Crookes Constructions engaged Bowsers for their proven expertise in delivering high-performance intumescent coatings for large-scale industrial projects.

SERVICES OFFERED:

Bowsers were tasked with applying intumescent coatings to ten 18-metre-high structural steel components to enhance fire resistance. A team of three skilled Bowsers applicators performed surface preparation, priming and the application of a double-layer coating system. All work was completed to the highest standard, fully meeting fire rating requirements and all relevant safety regulations.

PROJECT CHALLENGES:

Large-scale industrial projects inherently present complex challenges and high risks. Bowsers excelled at delivering tailored solutions to meet the demands of this high-pressure environment. The team successfully navigated the tight 3-week project timeline and while ensuring strict adherence to fire safety compliance requirements.

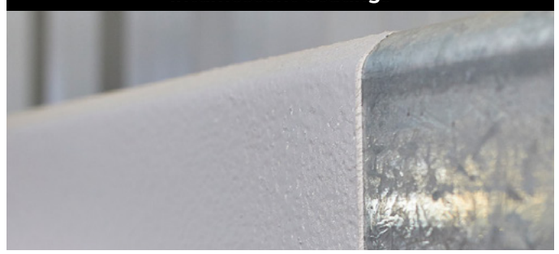
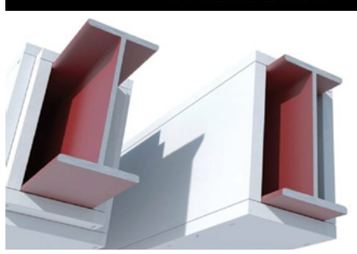
SOLUTIONS OFFERED:

Bowsers collaborated closely with Richard Crookes Constructions to integrate coating works into the broader construction schedule. Using specialised techniques and high-risk access equipment, the team optimised curing times and maintained regulatory compliance, without impacting the overall project timeline.

OVERALL OUTCOME:

The project was delivered on time, within budget, and to a high standard of workmanship. Richard Crookes Constructions commended Bowsers for their seamless coordination, technical capability and commitment to quality further cementing their reputation as a trusted partner in passive fire protection solutions.

Passive Fire Protection Options for Structural Steel

	Fire Sprays	Intumescent Coatings	Fire Rated Boards
			
	Wet mix Spray-applied Fire Resistive Material (SFRM) has been used in structural steel fire protection for decades. It is a low cost option and is generally used for internal environments as it is susceptible to damage by water ingress.	Intumescent is the newest fire protection methodology to come onto the market. Unlike boards and vermiculite, intumescent is a reactive material which expands to insulate structural steel in a fire event. Every intumescent has different material properties and therefore have different required thicknesses and expansion behaviour.	Fire-rated boards can be framed around steel or timber structures in order to fire protect structural members. The composition of boards will differ between manufactures however their general composition is made up of processed gypsum.
	Fire Sprays	**Intumescent Coatings**	**Fire Rated Boards**
Cost of Application	**Low**	**High**	**Medium**
Final Finish	**Good**	**Best**	**Better**
Weather Resistant	**Achievable**	**Achievable**	**Achievable**
Ease of Application	**Specialised (wet trade)**	**Specialised (wet trade)**	**Simplest**

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FPA AUSTRALIA GOLD MEMBER Fire Protection Association Australia
FIRE INDUSTRY ALLIANCE
qbcc queensland building and construction commission
cm3 GREENCAP ONLINE RISK SOLUTIONS
Master Builders Association MEMBER
MASTER BUILDERS QUEENSLAND Proud Member
FPAS Fire Protection Accreditation Scheme Recognised Business