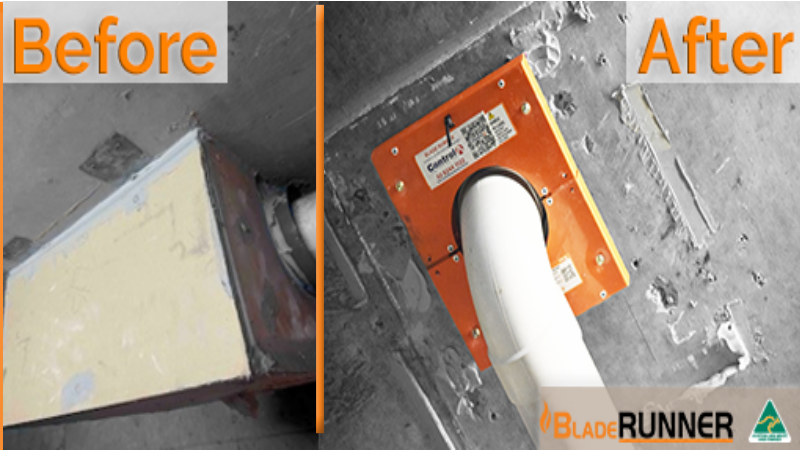


## CASE STUDY: STRATA MANAGEMENT AND BUILDING MAINTAINENCE

When outdated infrastructure threatens public safety, it takes courageous innovation to rectify hazards. This was the motivation behind Control Fire Protection's adoption of Trafalgar Fire's BladeRUNNER - an ingenious spring loaded retrofit fire collar that swiftly resolves non-compliant pipe penetrations. By rectifying non-compliant cast-in stack pipe collars, CFP elevated compliance and efficiency while minimising disruptions and expenses to all stakeholders. This case study explores how the BladeRUNNER Retrofit Floor Waste Fire Collar is solving real world problems.

## Project Description

Tasked by the strata body, Control Fire Protections project encompassed a comprehensive inspection and audit of a residential high-rise constructed in the 1990s in Pyrmont, Sydney. An exhaustive audit encompassing over 200 apartments uncovered a safety hazard – **non-compliant PVC stack and floor waste pipe penetrations traversing through concrete slabs** within the building's carpark. Traditional cast-in collars are inadequate against testing standards, leaving vital services unprotected. The impending danger to residents' safety prompted an immediate and efficient response.



## Challenge:

The crux of the project arose from the presence of non-compliant cast-in stack pipe collars, presenting a pivotal challenge. These collars posed a severe safety risk, necessitating a swift transition to compliant alternatives. Further complexities arose from existing box outs and bulkheads fitted with plasterboard, which lacked compliance with essential two-sided fire rating requirements. This situation necessitated the adoption of a fully compliant solution to align with strict building codes and regulations.



### Product

BladeRUNNER Retrofit  
Floor Waste Collar



### Project Size

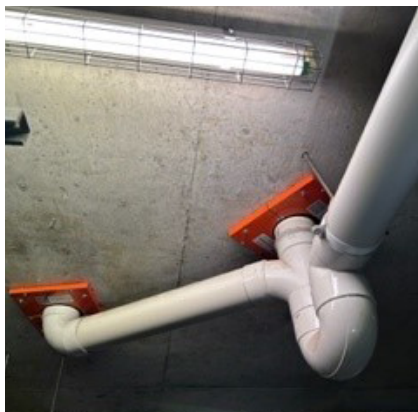
200 Multi-Storey Apartments

## Traditional Approaches vs. BladeRUNNER:

Traditionally, rectifying non-compliant floor waste collars involved labour-intensive methods. These approaches called for fire-rated boards, collars, sealants, other system components and skilled workmanship. The process was not only time-consuming but also aesthetically unsatisfactory, due to its bulkiness and space inefficiencies. Installation complexities allow for the possibility of human error - an unacceptable risk, with lives at stake.



*The installation process of building a compliant bulkhead with fire-rated boards can be quite tedious and expensive*



The BladeRUNNER, in contrast, represents a revolutionary departure from the conventional norms. The outdated methods of using heavy fire rated boards, time-consuming installations were replaced with the **BladeRUNNER's streamlined, under-2-minute installation process**. The BladeRUNNER is a slimline, cost-effective, and easy-to-install fire collar that meets fire rating levels for PVC floor waste pipes. It is a better alternative to bulky and expensive fire board enclosures and retrofit collars for non-compliant floor waste services and cast-in collars.

## Advantages of the Trafalgar BLADERUNNER:

- **Streamlined Installation:** The BladeRUNNER's remarkably swift installation process allowed faster project timelines, while minimising disruptions to the residents and reduced the number of technicians needed on site.
- **Industry Leading Fire Rating:** The BladeRUNNER has been tested in a floor waste application where there was no cast-in collar previously installed proving that the innovative design will work without relying on the presence of any cast-in collar above it. This test design was considered as being the worst, most onerous case where the blade mechanism must shut the pipe and rely solely on its own pre-loaded intumescent material to tightly seal the penetration for up to **4 hours (-/240/240)**. Testing in this orientation proves that the BladeRUNNER will work with or without the presence of a cast-in collar in the slab, and is suitable to upgrade non-compliant penetrations with or without cast-in collars.



*Learn more about the BladeRUNNER's Applications, Specifications, FRL's and Installation method in the [Technical Manual](#)*



## Advantages of the Trafalgar BLADERUNNER: (contd.)

- Economical Solution:** Procurement costs are notably lower than those associated with fire-rated boards, sealants, and other related system components. Its installation process, only requiring the use of four screws, significantly reduces costs. In addition, its user-friendly installation approach, requiring reduced time involvement and easier setup compared to fire-rated bulkheads or box outs, minimises the demand for highly skilled technicians. This synergy of cost efficiency and simplified installation positions the BladeRUNNER as a compelling solution for optimising resource allocation, making the project economically viable for all stakeholders involved.
- Space Optimisation:** The BladeRUNNER's slender design masterfully resolved the perennial space-related challenge. Its seamless integration with the existing structure elegantly circumvented the conventional bulkiness associated with interventions of this nature.
- Aesthetics Preserved:** A slimline design blended seamlessly into the existing infrastructure without bulky enclosures installed overhead under the floor slab.
- Stringent Adherence to Codes:** The BladeRUNNER's adherence to stringent building codes, including AS1530.4:2014, underscored Control Fire Protection's commitment to safety and regulatory standards.



Take a look at a Control Fire Technician install a BladeRUNNER on [Trafalgar TV.com](https://www.trafalgar.tv.com)



*"The Trafalgar BladeRUNNER is super quick and a cost effective retro fit solution for a very common issue with existing non-compliant PVC pipe and especially PVC floor waste pipe penetrations that have limited access to provide a tested methodology other than a bulky and expensive fire rated board enclosure especially within old and new buildings. The BladeRUNNER has revolutionised the passive fire industry for both the installer and the paying client. It enables a quick and cost-effective solution for a very common problem and proving to be an industry game changer."*

**Mark Sellars**

Passive Fire Project Manager at Control Fire Protection Pty Ltd

## Conclusion:

The transformative prowess of the BladeRUNNER Retrofit Floor Waste Fire Collar is showcased unequivocally through Control Fire Protection's project. A potent amalgamation of industry leadership, fuelled by the BladeRUNNER's innovation, has unfolded a solution that transcends traditional limitations. The BladeRUNNER embodies innovation, offering a cost-effective, space-optimised, and compliance-driven solution that propels fire safety to unprecedented zeniths.