

## Case Study

Rittal Australia / Tunnel Upgrade

# Rittal HD Enclosures Chosen for Tunnel Upgrade – A New Benchmark for Infrastructure Protection



As part of a major tunnel infrastructure upgrade on a key Perth urban transport route, a durable enclosure solution was required to support the installation of new smart camera systems.

This upgrade was part of broader efforts to enhance tunnel safety and traffic monitoring capability, including real-time surveillance, incident detection, and automated response systems. For the equipment to operate reliably in such a harsh environment, robust protection and compliance with strict ingress and corrosion standards were essential.

Electrical and communications contractors responsible for the installation worked closely with Rittal to deliver the solution.

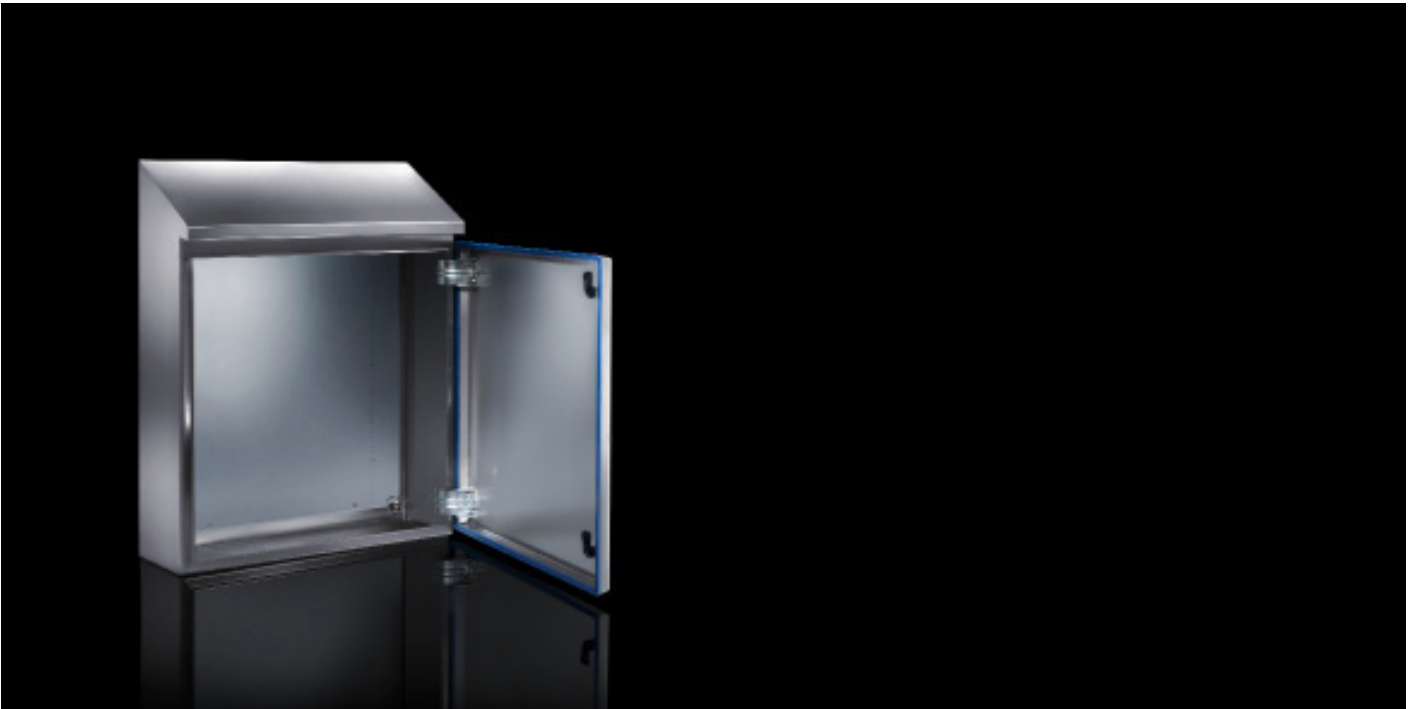
Although an alternative product had initially been specified, Rittal collaborated with the project team to demonstrate that its Hygienic Design (HD) enclosures provided a more robust, compliant, and cost-effective option. Following a detailed technical review, the Rittal solution was selected as it better aligned with the project's long-term operational and maintenance requirements.

## Beyond Food & Beverage: HD Meets Infrastructure Standards

Initially developed for hygiene-critical environments such as food processing and pharmaceutical manufacturing, Rittal's HD enclosures provide exceptional ingress protection (up to IP69K), corrosion resistance, and structural durability. These qualities make them an ideal choice for infrastructure applications exposed to moisture, chemical agents, airborne particulates, or frequent wash-down cycles, such as tunnel systems, wastewater treatment plants, and transport facilities.

## Key features include:

- Fully welded stainless steel construction: Protects against corrosion and chemical damage in challenging environments.
- 30° sloped roof: Prevents water pooling, aiding drainage and reducing long-term corrosion risk.
- FDA-compliant blue silicone gaskets: Easily visible for inspection and replacement, maintaining watertight integrity.
- IP66/IP69K protection ratings: Certified to withstand high-pressure washdowns and fine dust ingress.



## Project Execution

Given the live tunnel environment, installation work was carefully scheduled to coincide with weekend tunnel closures over a 12-month period. Rittal's fast product availability, modular system design, and comprehensive technical documentation supported an efficient and well-coordinated delivery in line with the electrical contractors' project plan.

## Outcome

Rittal's HD enclosures exceeded all technical and environmental requirements, proving that HD design principles can deliver long-term value well beyond traditional cleanroom applications. By offering proven protection, reduced maintenance needs, and strong local support, Rittal continues to be a trusted partner for infrastructure projects across Australia and New Zealand.

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