

Case Study

High-Security Facility Expansion – Planet Building Products

As part of an expanding development to a high-security correctional centre, Planet Building Products partnered with Trafalgar Access to further secure and modernise the facility's design. The project aimed to design and manufacture a custom high-security access panel system that would blend seamlessly with the building's previously upgraded ceiling finishes.

Project Description

Trafalgar Access was engaged by Planet Building Products to design and manufacture a custom high-security access panel system that would integrate seamlessly with a high-security correctional centre's upgraded ceiling finishes. Collaborating closely with the client, Trafalgar's engineering team developed a SCEC-rated solution that balanced functionality, strength, and aesthetics. The final installation delivered a secure and refined result, meeting the facility's performance and design requirements.



Challenges

The project required a high-security access panel that would seamlessly integrate into the ceiling without any visible flange, while also accommodating a SCEC-approved mortice lock. Achieving this meant balancing aesthetic requirements with strict security performance, and ensuring the panel could support a tile insert without compromising strength or access functionality.



Solution

Trafalgar worked directly with Planet Building Products to understand the specific requirements of installing a 450x450mm high-security access panel into a tiled ceiling system.

Our engineering team developed a customised High Security Access Panel with a tile-insert front door, combining the frame and locking mechanisms of our security panel range with the recessed door profile of our tile-insert models.

To accommodate the SCEC-approved mortice lock, the panel's frame depth and internal structure were re-engineered to ensure secure locking engagement while maintaining the necessary rigidity and tamper resistance. We also refined the door leaf construction to support the additional weight of the tile finish, ensuring the panel remained flush once installed.

Benefits

Custom Solution: This project required more than a standard product. Trafalgar engineered a bespoke access panel that met the unique dimensional, security and installation needs of the site, ensuring compliance without compromise.

Quality and Durability: Manufactured locally using robust materials and tested design methods, the panel provides long-term performance in a high-security environment. The SCEC mortice lock and reinforced framing ensure ongoing protection and reliable operation.

Aesthetic Integration: The tile-insert front door allowed the panel to blend seamlessly with the surrounding ceiling finish. The no-flange design ensured a flush, discreet appearance, supporting the architectural intent of a clean and uninterrupted ceiling plane.

Access for Maintenance: Despite the enhanced security features, the panel allows secure and controlled access to services where maintenance is required—ensuring ongoing building functionality without compromising safety or finish.

Unparalleled Technical Support: Trafalgar Access provides comprehensive technical support and documentation for all our products. From installation videos to technical manuals, we ensure that our clients have all the information and assistance they need for a smooth implementation process. Our dedicated support team is always ready to address any queries or concerns.

Australian Made Quality and Manufacturing:

Trafalgar Access's dedication to sustainable, high-quality manufacturing is a cornerstone of our operations. Our ISO certification is a testament to our rigorous standards and sustainable practices. By manufacturing our products in Australia, we contribute to the local economy, support Australian jobs, and minimise our environmental footprint. Our commitment to local production ensures strict quality control, rapid response times, and a level of craftsmanship that sets our solutions apart in the global market.



Conclusion

This project highlights Trafalgar's capability to provide specialised, high-security solutions tailored to complex site requirements. Working closely with Planet Building Products, our team ensured that the final outcome met the strict performance demands of a correctional centre environment while still achieving the architect's desired visual continuity.

We remain committed to supporting Planet Building Products and our industry partners with dependable, Australian-made solutions designed to meet the most challenging project conditions.

Testimonial

"We sincerely appreciate the support and design expertise provided throughout this project. The solution not only met all technical and performance requirements, but also achieved a clean, seamless integration with our custom-fabricated decorative ceiling panels. Your team's commitment to detail, collaboration, and quality made a significant difference to the final outcome. Thank you for your outstanding support."