



Reducing maintenance costs and complexity with an innovative single BMU system

80 Collins Street, Melbourne, is a high-profile commercial building with a unique and complex facade consisting of eight faces.

The building's original Building Maintenance Unit (BMU) weighed nearly 13 tonnes and was bulky, outdated, and difficult to maintain. Additionally, a second BMU had been installed in 1994, but operational inefficiencies required a safe separation between the two BMUs, causing logistical challenges. The client sought a modern, cost-effective solution that would improve maintenance accessibility while reducing long-term operational costs.

The Challenge: Overcoming Logistical and Structural Hurdles

The project presented several challenges, including:

- **Transport & Assembly:** The new BMU had to be transported to the rooftop via the building's goods lift, requiring meticulous planning to ensure each component fit within the lift's dimensions.
- **Structural Adjustments:** The existing track system required extensive upgrades, including welding a 30mm flat bar every 200mm along its entire length and reinforcing it with gussets for additional support.
- **Dismantling the Existing BMU:** The original unit had to be carefully cut into sections small enough to be manually removed via the lift, necessitating full scaffolding for a safe and controlled process.
- **Limited Crane Access:** With traditional craning methods unfeasible, the existing column BMU was modified into a temporary crane, equipped with an extended jib to lift and assemble the new unit with just 2mm of clearance.

The Vertimax Solution: A Smarter, More Efficient BMU System

Vertimax developed an innovative solution to replace both BMUs with a single, highly efficient facade access system, significantly reducing maintenance costs and operational complexities.

The new building maintenance unit featured:

- Turret and cage slewing for enhanced manoeuvrability.
- Three custom cage sizes to accommodate varying facade dimensions.
- Multi-Level access decks for maintenance and emergency descent.
- Cross-arm sheave adjustments to adapt to different cage configurations.
- Integrated 240V power supply within the BMU cage for operational ease.

By leveraging creative engineering and meticulous planning, Vertimax successfully navigated the project's challenges while ensuring safety, compliance, and long-term efficiency.

The Result: A Streamlined, Cost-Effective Facade Access System

The project was completed seamlessly, eliminating the need for a second BMU while enhancing the building's maintenance capabilities. The installation marked Australia's first GinD manufactured BMU, reinforcing Vertimax's reputation as a leader in innovative building and facade access solutions.

By reducing equipment complexity and long-term costs, our solution delivered a safer, more efficient, and cost-effective facade maintenance system tailored to the needs of 80 Collins Street.