

Smart Innovation in BMU Replacement 305 William St, Melbourne



305 William Street in Melbourne required an urgent upgrade to its aging Building Maintenance Units.

The site had two BMUs, one on Level 17 that needed a full replacement and another on Level 18 that required a major upgrade. The existing units were over 25 years old, making maintenance costly and sourcing replacement parts for the hoisting and control systems increasingly difficult. The client needed a cost-effective, future-proof solution that would improve maintenance access while staying within budget and tight time constraints.

The Challenge: Complex Logistics and Structural Modifications

The project presented several logistical and structural challenges, including:

- Limited access for transporting the BMU The most suitable lift for transporting BMU components was too small, and the only alternative was a dedicated lift for judges, making it unsuitable.
- **Crane restrictions** Using a traditional mobile crane to lift the BMU to the rooftop would be costly and difficult to arrange due to site constraints.
- Upgrading wall restraint pins The original wall restraint pins required a redesign to meet modern AS1418.13 safety standards.
- Strict deadlines The project had to be completed within a tight financial budget and timeframe, with much of the work requiring after-hours execution due to the presence of law courts in the building.

The Vertimax Solution: Smart Engineering to Overcome Access Limitations

With extensive experience in facade access systems, Vertimax provided a unique solution that minimised cost and complexity. Our team executed the project with in-house expertise, ensuring seamless coordination across all aspects.

Key solutions included:

- A smart crane conversion We modified the Level 18 BMU, allowing it to function as a temporary crane to lift the new Level 17 BMU components onto the rooftop. This approach eliminated the need for an expensive mobile crane and provided ongoing utility for future plant refurbishments.
- Custom-designed restraint pin adaptors Our engineers developed, tested, and certified new restraint pin adaptors to meet Australian safety standards, ensuring a smooth and compliant BMU upgrade.
- Full electrical and hoisting system upgrade The Level 18 BMU received a new hoisting system, along with necessary electrical and cage modifications, enabling it to function more efficiently.
- Seamless installation and disposal The old BMU was carefully dismantled into manageable sections, and lowered using the Level 18 BMU for efficient removal and disposal.

The Result: A Cost-Effective, Efficient BMU Solution

Vertimax's innovative approach ensured that both facade access systems were successfully upgraded while reducing overall costs and operational disruptions. By converting the Level 18 BMU into a crane, we provided a long-term value-add for the client while delivering the project on time and within budget. The upgraded systems now offer improved reliability, compliance and ease of maintenance, ensuring 305 William Street remains future ready for years to come.

Client Testimonial

Vertimax undertook a major upgrade and a full replacement of the two BMU'S we have on site at Melbourne Commonwealth Law Court, 305 William Street. With tight time frames and buildability issues, we found Vertimax to be very professional and knowledgeable in their area of expertise. I would certainly have no hesitation in recommending Vertimax for all further BMU needs.

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