



Replacing an End-of-Life BMU on One of Sydney's Most Recognised Towers

Australia Square at 264 George Street is one of Sydney's most recognised commercial addresses. Designed by Harry Seidler, the 48-storey circular tower is a landmark in the city's skyline. Its curved form and mullion guide system for cradle restraint made it technically demanding from the outset. When Dexus engaged Vertimax, the existing Building Maintenance Unit had reached the end of its serviceable life.

The Challenge: Replacing a BMU on a Circular 48-Storey Tower

Replacing a BMU on a circular high-rise in the CBD is not a standard exercise. The building's geometry, age of the existing installation, and constrained internal access routes all contributed to a technically demanding project.

- **Constrained internal access:** All new BMU and track components had to be lifted through internal access hatches and navigated through narrow corridors to the rooftop. The same restrictions applied to removing the old equipment for recycling.

- **Circular building geometry:** The curved facade and existing mullion guide infrastructure required careful consideration to ensure full perimeter coverage and correct cradle restraint at all positions. With the original cast-in bolts of uncertain structural capacity, the new system was engineered to achieve full stability through counterweight alone, with the cast-ins used for lateral restraint only.
- **Removing 15 tonnes of steel:** The old BMU and track system had to be taken out through the same constrained internal access routes and removed from site for recycling.
- **Transition sequencing:** Vertimax worked with Dexus to bring the existing BMU back into limited operation for a specific project requirement before final decommission, requiring careful staging.

The Vertimax Solution: A New GinD BMU Built for the Circular Form

Vertimax replaced the existing BMU with a new GinD-manufactured BMU and installed a new track system suited to the building's circular geometry. To manage the track curvature, the entire roof was surveyed in 3D, with each track section individually checked after galvanising before being sent to site. The system was designed around two interchangeable cradles to provide complete facade coverage, allowing operators to switch configurations depending on access requirements at any point around the perimeter.

The mullion guide infrastructure running the height of the building was integrated into the new cradle restraint system, maintaining Seidler's original access approach while bringing the equipment up to current standards. Approximately 15 tonnes of steel was removed through the building's internal access routes without damage to the building fabric.

The Result: Back in Full Operation Within Weeks

The new BMU was commissioned and put to immediate use. A full facade clean was completed within a couple of weeks of commissioning. Facade repairs and a 20% facade inspection have since been carried out, with both cradle configurations in active use.

Australia Square now has a modern, reliable facade access system purpose-built for its circular geometry, with full perimeter coverage for years ahead.

