



Before: Salt attack promised a limited life and balconies blocked ocean views



The remedial team exposed the structural steel to inspect the corrosion before repairs



After: Building enjoys a new lease on life and its balconies now give clear views of the ocean

PRESERVATION TECHNOLOGIES

CASEFILES

Beachside apartments revitalised including CP installation

The problem: Situated right on the beach, the apartments had suffered some deterioration with salt ingress to external concrete and masonry elements causing corrosion of structural steel. Original masonry balustrades obstructed ocean views and their removal offered the opportunity to raise the overall look of the building and boost property values.

The constraints: Although the building was unoccupied during the works, there was a strict deadline for the apartments to be available for autumn school holiday leasing and occupancy.

The solution: A detailed specification was formulated by the project architect in consultation with specialist remedial consultants. The design incorporated an impressed current cathodic protection system embedded in each balcony.

The methodology: Fixed scaffold towers were erected around each set of balconies so that multiple trades could operate simultaneously. The

existing masonry balustrades, tiles and screed beds were removed. Deteriorated slab edges were repaired and a new reinforced concrete hob was constructed around each balcony to take the new stainless steel and glass balustrade system. The structural steel columns at each balcony were exposed, prepared and protected. Brickwork was then reinstated and new aluminium column cover plates fixed over the columns to provide further protection. Following the installation of the ICCP system new screeds and tiles were installed. Finally all balcony and car park soffits, eaves and fascias were painted.

The result: Project successfully delivered with no safety issues. Building revitalised in this prime beach location.

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To whom it may concern

Reference for Preservation Technologies Pty Ltd

The owners of Strata Plan 5427 comprising 16 beachside apartments on Avoca Beach undertook an extensive investigation, assessment and design and specification process to repair and protect their building.

I was appointed project architect and was supported by Cardno (NSW) Pty Ltd as structural engineers and Mahaffey Associates in the role of corrosion specialists.

Following a tender evaluation process including an extensive interview to establish the contractors Cathodic protection design and bona fides, Preservation Technologies was awarded the contract.

The main elements of the project included the following;

- Demolition of balustrades, tiling and screeds to balconies
- Concrete repair to slab edges and soffits
- Design, installation and commissioning of CP system to balconies
- Structural steel column investigation and repair
- Brickwork repair and rebuilding
- Painting of fascia, eaves, soffits and slab edges
- Installation of stainless steel glass balustrade to balconies
- Re-tiling of balconies

The project was professionally managed with excellent site support and supervision including technical and practical know how to solve some unexpected issues relating to structural steel corrosion. The skilled site team delivered a quality outcome to the satisfaction of the owners and consultants.

In my capacity as project architect representing the owners I am more than willing to provide this project reference to Preservation Technologies.

Yours sincerely

trevena

Lindsay Trevena B. Arch FRAIA