TRACE STRUCTURAL INVESTIGATIONS

ADVANCED CORROSION QUANTIFICATION IN BALCONY INSPECTIONS

Inspection of precast concrete balcony slabs using iCAMM technology, particularly assessing the condition of prestressing strands within the slabs..

CHALLENGES

Key challenges involved accurately assessing the condition of internal prestressing strands through non-destructive methods, despite the presence of a concrete topping layer.

SOLUTIONS

The iCAMM scanning tool was used to evaluate the magnetic properties of the prestressing strands directly through the concrete topping layer, offering a non-intrusive inspection method.

RESULTS

The iCAMM technology enabled efficient inspection of each balcony in less than one hour, quantifying section loss in the strands due to corrosion and correlating well with visual observations.

BENEFITS

Benefits of using iCAMM included quick and effective quantitative results for steel reinforcement under cover, enhanced safety, time-saving, and cost-effective compared to traditional inspection methods.

iCAMM

scanner

Concrete topping layer (20-50 mm thick)

