

**Balcony Mitigation Repairs
for Suburban Residential Complex**
Niles, IL



View of Typical Balcony Tier



Close-up Photos of Typical Balcony Deterioration

Client:

Terrace Square Condominium Association

Scope of work:

As part of our investigation, it was discovered that many resident balconies were originally designed in ways to allow water to prematurely age the precast concrete structures and steel guard rail assemblies and enter the buildings. Railings were found to violate current building code strength and picket spacing requirements.

After sounding the undersides of 270 balconies with visible distress, our team determined fifteen balconies to be imminently hazardous. These required demolition and the design of long-lasting replacement balconies to most closely match the appearance of all the remaining balconies. For this, our work included:

- An investigation to determine the source points of balcony distress
- The design for the replacement of deteriorated ornamental steel components and new code-compliant guard rails.
- The design for the replacement of concrete structural and non-structural components
- The design of new sloped balcony topping slabs, to drain rainwater out and away from the building walls
- The design of a new topside balcony waterproofing system and wearing surface
- Construction observation services to monitor the quality of the repair work



Partial Demolition of Existing Distressed Balcony



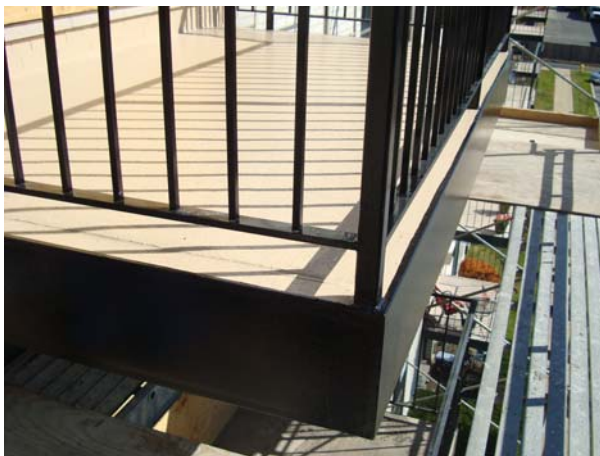
Replacement of Steel Reinforcement, prior to Casting Deck



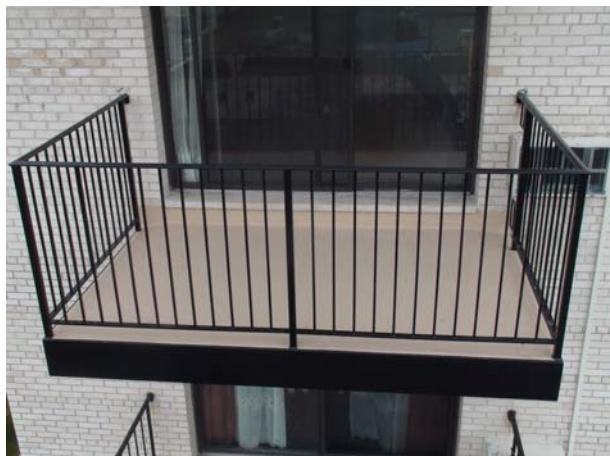
Pouring the Replacement Balcony Concrete Structural Deck



Installation of New Topping Slab and Matching Perimeter Steel



Installation of Prefabricated Replacement Painted Steel Railing



View of Completed Balcony Construction with Traffic Coating