



# Crossways Shopping Centre

The shopping centre comprises over 17 stores, cinemas and restaurants. The carpark, on the northern side of the building, is heavily relied upon by customers for off-street parking.

Location  
**Subiaco,  
Western Australia**

Client  
**Crossway Management**

Completed  
**2022**

Structure  
**Roof Top Concrete Carpark**



## The Problem Identified

Crossways Shopping Centre is located close to a marine environment and the roof top position of the carpark means that it is particularly exposed to the elements. The decking was exhibiting the early signs of corrosion and insufficient reinforcement cover was indicated by surface cracking and delaminated/drummy sections.



## The Solution Developed

The rehabilitation proposal included a detailed condition assessment of the carpark. Diagnostic testing was undertaken by RSA Engineering who prepared a specification for repair intended to maintain the concrete elements and structure for a minimum 20 years.

It was proposed that PatchGuard galvanic anodes should be positioned where the spalling was evident on the soffits of the shops below the carpark. As a precautionary measure anodes were also installed adjacent to patch repairs on the roof deck prior to the application of a trafficable membrane to the entire 2,500 square meters of the carpark decking.

Access was restricted during the initial repairs as the carpark had to remain open during corrosion control requirements and membrane installation.



## The Benefits Provided

Each PatchGuard anode was individually installed into the parent concrete and connected to the reinforcement. The system provides enhanced current distribution to the areas of steel at risk of corrosion and allows the use of bonding primers and either high or low resistive mortars within the patch repair. The system is designed to prevent the effects of the incipient corrosion effect adjacent to patch repairs. An additional coating was applied to provide further protection from the elements and provide an aesthetic appeal.

NK West Pty Ltd are specialist remediation contractors chosen because of their experience and competence to remediate the concrete carpark and install the galvanic protection system. The project was completed on time and within budget. It will be subject to annual monitoring.



Spalling to soffit below car park.

## CPT Products Used



PatchGuard™

