

Nine years of extreme UV no match for vibrant colours

Edgewater Station Car Park
Edgewater, WA

Project partners

Asset Owner: Public Transport Authority of Western Australia
Applicator: Kaefer Novacoat and Fero Blast (now DSI Underground)
Architect: Hunt Architects
Builder: Georgiou Group

Challenge

The coatings system needed to provide powerful, long term protection from corrosion as well as superior colour performance and UV resistance. Graffiti resistance was a high priority for the finish, as well as tolerance of repeated exposure to chemical cleaning agents.

Coatings solutions

Dulux® Zincanode® 402 and Dulux® Duremax® GPE are both designed to provide reliable protection in harsh and severe environments by preventing cathodic corrosion and safeguarding structures against damage. Meanwhile, Dulux® Weathermax® HBR is a specially developed coating that provides exceptional durability and requires minimal upkeep.

- First coat: Dulux® Zincanode® 402 @ 75-microns (µm)
- Second coat: Dulux® Duremax® GPE @ 150-microns (µm)
- Topcoat: Dulux® Weathermax® HBR @ 100-microns (µm)

Timeline

The coatings were spray applied to the steel in 2016. An on-site visual inspection of the coatings was conducted in March 2023.

Coating rating after 9 years

Level 2*

Results

The Weathermax HBR colours retained vibrancy and gloss after 8 years of harsh UV exposure. Pigments in the orange, yellow and red spectrums are typically the most vulnerable to colour loss after extended periods of UV exposure. The Weathermax HBR colours performed well, showing only minor dulling of the gloss in sections most exposed to UV.

Regular maintenance cleaning by PTA has prevented soil and dirt ingress damaging the coating finish. Importantly, the inspection revealed no evidence of corrosion.

* Coating Inspection 5-Level Rating System

Coatings are inspected to determine the degree of deterioration. Ratings indicate the following condition status:

- No film damage other than dirt and minor staining
- Soiled, stained, ingrained dirt, minor chalking or loss of gloss
- Minor film damage (cracking, flaking or erosion of topcoats) in small areas
- Minor corrosion where up to 0.5% of the base metal is showing signs of rusting
- Widespread and excessive corrosion and damage

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Coating
inspection