

Coatings integrity intact after 6 years

Yagan Square, Perth, WA

Project partners

Applicator: Fero Group (now DSI Underground)

Architect: Lyons Architecture & Iredale Pedersen Hook Architects

Fabricator: Fremantle Steel Group Landscape Architect: ASPECT Studios

Challenge

The Yagan Square redevelopment, which was completed in 2017, required extensive preparation and painting of all external mild steel surfaces.

The architects and project stakeholders sought a matt, sparkly finish for the steel. Our coatings system needed to realise the architect's aesthetic vision while guarding against corrosion and delivering an extended maintenance cycle.

Coatings

The steel coatings were spray applied in the yard, prior to transportation to the site. The following systems were used in the MIO colours Mid Grey and Natural Grey:

External Steelwork

- 1st coat: Dulux® Zincanode® 402 @ 75-microns (µm)
- 2nd coat: Dulux® Ferreko® 3 MIO @ 100-microns (µm)
- Topcoat: Dulux® Ferreko® 3 MIO @ 100-microns (µm)
- · Stripes and bolts as well.

Digital Tower columns

- 1st coat: Dulux® Zincanode® 402 @ 75-microns (µm)
- 2nd coat: Dulux® Ferreko® 3 @ 90-microns (µm)
- Topcoat: Dulux® Ferreko® 3 @ 90-microns (µm)

Timeline

The redevelopment of Yagan Square began in 2016. Steelwork was coated and installed in 2017, ahead of the grand opening of the space later that year.

Coating rating after 6 years

Rating 1* (above public access)
Rating 2* (at ground level)

Results

Six years after its initial application, Dulux Protective Coatings' system at Yagan Square underwent a visual inspection, which found the coatings to be in very good condition at ground level and in excellent condition above that.

The Ferreko 3 was in sound condition, with no flaking or delamination present on the tall columns. At ground level, some staining and marking of the coating was visible, due to the low sheen finish being susceptible to marking if touched.

* 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, 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



Digital tower