

# **Steel rings corrosion free after 6 years**

Lake Macquarie Transport Interchange Roundabout Lake Macquarie, NSW

## Project partners

Specifier: EJE Architecture Builder: Daracon Group Builder: Alfabs Group

# Challenge

Achieving the right colours in a highly durable system was the key challenge of this project.

For the steel art installation, a C3 coating system was required to address the medium corrosivity environment. An isocyanate-free topcoat was requested for application in a public space.

Considerations for the roundabout surface were colour, longevity and easy application.

### Coatings solutions

The steel rings were coated with the following system:

- Dulux® Zincanode® 402 at 75-microns (µm)
- Dulux® Duremax® GPE at 200-microns (um)
- Dulux® Acrathane® IF at 60-microns (µm)

The roundabout surface was coated with:

- Dulux® Luxafloor® LGE at 150-microns (µm)
- Dulux® Luxafloor® PTX at 100-microns (µm)

### **Timeline**

The installation and roundabout surface were coated in 2016. Dulux Protective Coatings performed an on-site coatings assessment in December 2022.

# Coating rating after 6 years

Level 2\*

### Results

The steel rings were still corrosion free after six years. There was some expected chalking and loss of gloss on the topcoat due to extreme UV exposure. For aesthetic reasons only, the colour could be updated with a clean and new topcoat.

Due to the high traffic environment, there was some ingrained dirt on the rings and roundabout surface. Regular cleaning of steel and concrete is also recommended but some dirt ingress is to be expected in this very heavily traffic environment.

\* 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
- $\bullet$   $\,$  Minor corrosion where up to 0.5% of the base metal is showing signs of rusting

