

Case Study

Job: Monash Freeway, Melbourne, Australia
Total Area: 800 sqm.
Description: Six year old existing paint was peeling and flaking off concrete road barriers and bridge parapets. The old coating had to be removed and ProGuard applied.
Constructor : Existing bridge
Asset Owner : Vic Roads



The Monash Freeway in Melbourne, Australia carries more than 120,000 cars per day. It is one of the busiest freeways in the country. A problem arose where a six year old competitive anti carbonation paint was peeling and flaking off the bridge parapets and road safety barriers at the South Gippsland Hwy overpass. Nanokote Pty Ltd was contracted in 2011 to remove the old coating and apply its ProGuard coating to Vic Roads Specification 685 (Permanent Anti Graffiti) and 686 (Decorative Anti Carbonation Concrete Coating). All of this work had to take place at night with traffic control due to the amount of traffic the freeway carries.

Normally to achieve the specification of being a permanent anti carbonation and permanent anti graffiti coating system the painting process involves the five steps below:

- 1) A high pressure wash (in this case was also used to remove the old coating)
- 2) 24 hours later, a coat of pimer
- 3) 24 hours later, first coat of acrylic
- 4) 16 hours later, second coat of acrylic
- 5) 7 days later, a coat of 2 pack polyurethane

Nanokote Pty Ltd, using our patent protected ProGuard coating was able to complete this work in less than one third the time it would have taken for a competitive systems to be applied. This represented a significant savings for Vic Roads in traffic control and labour. The coating process with ProGuard that allows this is as follows:

- 1) A high pressure wash (in this case was also used to remove the old coating)
- 2) Direct application of ProGuard to damp concrete.
(even though ProGuard can be applied as a one coat process to concrete,
Vic Roads specification calls for two coat wet on wet, 30 minutes apart)

Nanokote Pty Ltd is a Division of Australian company Micronisers Pty Ltd. The Group of Companies are trail blazers in the field of nanomaterials in Australia. Nanokote specializes in providing finished coating materials in the form of specialised thin films, barrier coatings and functional coatings. We engineer and implement clever ways of enhancing the value of our customer's products which results in our customers increasing their competitive edge. Our products introduce ways of differentiating our customer products enabling premium prices, increased market share and strong returns on investment.