

INNOVATION IN CONCRETE COATING



Perfect for Winter months - application down to 3° C



Single coat application directly onto dry or damp concrete



Exceptionally fast application

Simon King, Technical Director of Nanokote Pty Ltd talks about the latest innovation in decorative anti-carbonation and anti-graffiti protection coating for concrete.

Nanokote has been working with government road & rail authorities for five years as the need for next generation concrete coating materials was identified. The brief called for best practices in order to achieve cost efficient design, enhanced service life, reduced maintenance costs and the utmost in safety.

Can you tell us more about the technology behind **ProGuard™**?

ProGuard™ is a modified polysiloxane hybrid for the decorative protection of concrete and provides excellent protection from concrete cancer combined with permanent anti-graffiti and easy to clean/self-cleaning functionalities.

ProGuard™ has outstanding resistance to corrosion and better weatherability than aliphatic polyurethanes. ProGuard™ can be applied directly to dry or damp concrete in a single coat.

Manufactured in Melbourne Australia and protected under a global patent, ProGuard™ is available in any colour, certified by VicRoads Sec. 685 & 686 and meets all Green Star rating requirements with a low VOC content of 63g/litre.

What are the unique characteristics that differentiate **ProGuard™** from other coatings?

The most important factors in delivering on time and on budget projects is speed of application and minimising time lost due to weather, this is especially critical during winter months.

• Single Coat System (or two coat wet on wet):

ProGuard™ is a single coat system for anti-carbonation and anti-graffiti requiring no priming which allows a single coat to be directly applied to dry or damp concrete.

This replaces typical competitor systems of a standard 4-coat system: primer, two separate coats of acrylic (24 hours apart) followed 7 days later by a 2 pack polyurethane topcoat anti-graffiti.

Single coat application becomes critical when carrying out works on existing infrastructure necessitating road or lane closures. Reduced losses from toll road closures and reduced ancillary costs of traffic management and access equipment combine to reduce risk and cost to the contractor by up to 75%. Working on the side of operating roads is dangerous at the best of times, a reduction in time required to apply the coating due to fast single coat application reduces the chance of injury to workers.



Simon King at a regional rail line in Victoria. The contractor was able to apply the coating in 1 day saving 3 additional days closure of rail line.

• Damp Environment:

ProGuard™ greatly reduces delays and associated costs from adverse weather. ProGuard™ can be applied directly to damp concrete at temperatures as low as 3° C reducing lost time from rain or environments where morning dew or high humidity cause delays. Typical competitor systems cannot be applied on damp surfaces or at temperatures below 10° C.

• Bond Strength:

Chemical bonding with the concrete creates a bond strength of greater than 7 times that of competitive coating systems. This results in an incredibly durable coating that reduces the likelihood of flaking, peeling or blistering. Extending the period of protection, providing long term downstream benefits for the asset owner.

What type of projects is **ProGuard™** suitable for?

ProGuard is suitable for a variety of applications where concrete is used including heavy infrastructure – tunnels, bridges and safety barriers and civil construction including ports and marine developments, sports stadiums, stations, shopping centres, apartment buildings and car park floors.

Nanokote is a division of Australian company Micronisers Pty Ltd. The group of companies are trail blazers in the field of nanomaterials in Australia and has worked closely with CSIRO in developing commercial applications in nanotechnology.

For more information www.nanokote.com.au or call 03 9768 3277 or email nanokote@nanokote.com.au



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