MASTER PAINTERS AUSTRALIA
"painting a brighter future"
VICTORIA / TASMANIA

finishing trades association of australia

Information Data Sheet

Concrete Cancer

Concrete cancer is a time bomb ticking away in many industrial, commercial and even residential buildings, says Michael Hambrook of the APMF. With the post war building room, Australian architects commenced a love affair with concrete which reached its peak about 10 years ago. But several buildings which incorporate untreated concrete in external applications are now showing signs of surface deterioration and even structural failure.

The problem is that concrete can be affected by loss of protective alkalinity due to reaction with atmospheric carbon dioxide. Where this occurs, chemical changes can take place in the concrete which reduces its strength. Worse still steel re-enforcing within the concrete car rust and the pressure this creates can cause the concrete to crack and crumble. Buildings in coastal areas are especially at risk. The most frightening thing is that the corrosion can be going on under the surface and will not be noticed until the concrete starts to visibly disintegrating.

One solution is the use of a protective coating. A number have been developed by paint manufacturers and some have now been in use for over 10 years and continue to give good protection. The range of cements aggregates and other constituents in use is so wide; however, that care is necessary in assessing the type of coating most appropriate. Due to roughness, coating defects, etc. the use of a sealer, filler or levelling coat may be required.

Concrete cancer can be treated says Michael Hambrook but, like the real thing, prevention is better than cure and property owners could save themselves thousands of dollars by inspecting concrete surfaces and applying protective coatings before structural failure occurs.