

Tanacoat Case History

CAIRNS ESPLANADE BOARDWALK and LAGOON DECK



Cairns Esplanade Lagoon and Boardwalk are high-profile projects in one of Australia's foremost tourist destinations. The swimming decks and 600m long boardwalk built in January and December 2003 respectively, were recently coated with Tanacoat, a new, advanced, timber oil.



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Condition of the Timber

At construction stage, the lagoon decks were painted with a clear film-forming timber coating, whilst the boardwalk decking timbers were left untreated. The lagoon deck coating deteriorated rapidly resulting in severe checking and cracking of the timber boards. This is typical of timbers that are inadequately protected as a result of poor quality coatings and wrong specifications for extremely hot, wet environments. The harshness of maintenance chemicals used in the lagoon should not be underestimated as these chemicals quickly accelerate deterioration of both the coating and timber.

Preparation

The lagoon hardwood decking was water-blasted at 3500 psi to remove deeply embedded chemicals and traces of the old coating whilst care was taken to avoid feathering. The untreated hardwood boardwalk deck timbers were lightly water-blasted at 1500 psi. All timbers were then allowed to dry out thoroughly prior to oiling with Tanacoat.

Application

Although Tanacoat is a new-technology timber oil, it is an easy to apply, fast-drying oil, and consequently, it can be applied by unskilled but supervised labour. Three coats of Tanacoat were applied to the swimming decks, whilst two coats were applied to the boardwalk. 24 hrs was left between first and second coats, whilst 48 hrs was left between second and third coats. Application was done at 32 deg.C air temperature.

Coverage

An average coverage of the pool decks was 2.5 and 3m² per litre per respective coat and the boardwalk achieved 3.5 and 4 m² per litre per respective coat. The coverage rates on this timber reflect its open nature and dryness and the effect of extreme climate exposure. Subsequent coats will yield a higher coverage rate as the open pores are now filled with Tanacoat. Coverage rates on new timber will vary depending on its porosity. Coverage rates will be approximately 12-14 m² per litre on dressed timber and 6-8 m² per litre for sawn surfaces.

Project manager Alban Scotland, an Engineer with the Cairns City Council, commented on the quality and efficiency of Tanacoat and said that the job ran very smoothly.

*The MSDS and TDS and other information about Tanacoat can be found on the OSA website;
<http://www.outdoorstructures.com.au/tanacoat.php>*

This does not represent an official endorsement of Tanacoat by the Cairns City Council.



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