

Singapore's Cooled Conservatories at Gardens by the Bay stands proud whilst being protected with coatings from AkzoNobel

The cultural wonderland of the Marina Bay area of Singapore now has a new structure for visitors and residents to marvel at – the Cooled Conservatories. The structures are part of the Gardens by the Bay, another element of Singapore's vision to become a 'City in a Garden'

The Cooled Conservatories, which won the World Building of the Year Award at the World Architecture Festival (WAF) 2012, lies at the heart of Gardens by the Bay. Together, the adjoining conservatories are amongst the world's largest climate-controlled glasshouses and cover an area of 20,000m² (215,279ft²).

They feature a 1.2 hectare (3.17 acre) 'Flower Dome'; a cool dry conservatory telling the story of plants from the Mediterranean and semi-arid subtropical regions of the world, and a 0.8 hectare (1.81 acre) 'Cloud Forest', a cool moist conservatory showcasing plants from the Tropical Montane environments.

Using a system of gridshell and arches, the structures permit as much light as possible to wash over the plants within. The gridshell is designed to support its own weight and the weight of the glass.

Both the gridshell and the arch structures of the building have been protected with high performance coatings from AkzoNobel. The system specified used Interzinc® 52, Intergard® 475 and Interthane® 990 with over 50,000 litres (10,999 gallons) of coatings being used on the project.

AkzoNobel worked with main contractors Woh Hup Pte Ltd, along with fabricators YongNam Engineering (for the conservatories) and TTJ Design & Engineering (for the Supertrees), to deliver the exact finish necessary for the structures.

"It was vital that a high quality finish was delivered for both the conservatories and the Supertrees"

explained AkzoNobel's Sales Manager in Singapore.

Over the last three years, AkzoNobel's coatings' have been used on several projects receiving recognition at the WAF Awards, with previous winners also including the Soccer City National Stadium in Johannesburg, South Africa; winner of the 2010 Sports Category Award. The Media-TIC Building in Barcelona, Spain also picked up the main prize of World Building of the Year, at the 2011 awards, alongside the Kurilpa Bridge, Brisbane, Australia, which picked up the World Transport Building of the Year prize at the same event.

