

RACV ROYAL PINES GOLF RESORT

Gold Coast QLD, Australia



SYSTEM **ARDEX**
PREMIUM PERFORMANCE

A premier world-class resort with a steadfast commitment to energy conservation had to work closely with suppliers and builders to overcome some unique hurdles during its recent refurbishments.

The RACV Royal Pines Golf Resort on the Gold Coast undertook an extensive upgrade in which the 27 hole golfing resort was elevated to world class standard.

Key points of consideration during the design and build process were the area's Zone B grading (second highest wind zone in Australia); a commitment to minimising ongoing energy usage; and a need to continue operation of the resort throughout the refurbishment process.

The roof of the main 21 storey tower building required a new roofing membrane as the existing membrane – bitumen sheet over-coated with a liquid acrylic membrane – was exhibiting early signs of failure with blistering and some cracking appearing.



Specifications required a new membrane that could be installed over the existing membrane – to negate the need for removal of the existing membrane (a process that would present an element of risk to guests and employees of the resort). The membrane would also have to be able to withstand high wind speeds, consistent with its Zone B grading, while contributing to the ongoing reduction in energy consumption.

ARDEX Australia devised a system whereby the Ardex **TPO** (Thermoplastic Polyolefin) membrane would be installed using a mechanical fixing technique that would exceed the standards required for the possible high wind uplift pressures of the area.

Key aspects to the specification of the **TPO** membrane were its solar reflectance of a significant 79 per cent – a factor that would reduce the heat absorbed by the building, which is in a sub tropical location, and therefore reduce the energy required to cool the building.

Other factors making the Ardex membrane the superior option were its extended service life, its ease of installation over the existing membrane and its exceptional sustainability properties.

The **TPO** membrane was used to cover a roof area of 600 square metres and has a projected lifespan of up to 20 years.

All aspects of the **TPO** membrane installation complied with the extremely high environmental sustainability standards set by the owners of the development.

Environmentally the **TPO** waterproofing membrane has some definite advantages – its chlorine-free, non-halogenated and plasticizer-free formulation, in combination with the hot-air welded seaming method, produce no emissions harmful to the environment. The membrane can also be easily recycled and has a lower manufacturing footprint than comparable systems.

PROJECT REFERENCE – WATERPROOFING

