



Tarkett shines in Australia's first 4 Star Green Star hospital

Project: Royal Adelaide Hospital, SA

Product: iQ Granit
iQ Granit SD & Safety
Airmaster Carpet Tiles

The Royal Adelaide Hospital – Australia's first large-scale hospital to achieve a 4 Star Green Star rating (Healthcare Design v1) and also the country's largest Green Star project – has used a host of Tarkett vinyl sheet flooring and Desso carpet tile products to cover the building's expansive footprint.

The new Royal Adelaide Hospital (RAH) is part of the biggest health and research precinct in the Southern Hemisphere. The new 10-storey building footprint occupies 175,000m² of a 10-hectare site and structurally spans the equivalent of three city blocks.

The Tarkett vinyl flooring was specified for its suitability in healthcare environments in terms of durability, hygiene and aesthetics. Its sustainability credentials such as GreenTag Level A certification also dovetailed with the hospitals' ambitious Green Star rating target. iQ vinyl flooring is also renowned for delivering the lowest life cycle costs on the market – providing substantial costs savings on cleaning and maintenance over the life of the floor.

Tarkett national marketing manager, Stacey-lee Smith, said the company has a long history of developing products that enhance people's wellbeing and minimise impact on the environment. "We are committed to developing sustainable flooring solutions that respect the environment," said Ms Smith. "We have adopted the cradle-to-cradle approach from product design to end-of-use in order to ensure that our flooring becomes part of something new again. "We apply this eco-design across materials, manufacture, distribution, installation, use, maintenance and recyclability. All our products have simple, clear information about the contents of our flooring and its sustainability.

"A driving force for us is to develop processes and products that meet the highest standards for sustainability, from production through to disposal or recycling. We try to reduce water, chemical and energy consumption in our factories and ensure that waste and pollution are minimised. ISO 9001, ISO and 14001 and OHSAS 18001 certifications recognise the efforts we make to ensure that our production processes respect people and the environment. Our vinyl flooring has undetectable VOC emissions, is phthalate free and 100 percent recyclable."

Celsus, as part of a public-private partnership with the State Government, is charged with maintaining the Hospital with its facility management subcontractor, Spotless.



Celsus operations director, Greg Wenham, said that whilst sustainability credentials were a key consideration for all aspects of the building's construction and fit-out, including flooring. Tarkett vinyl flooring was chosen primarily for its suitability to withstand the hospital's high-intensity cleaning regime.

"We recognise that the Tarkett vinyl flooring has proven hygiene credentials suitable to healthcare facilities and that it has sustainability credibility that fits with the hospital's Green Star goals," Mr Wenham said. "This was considered at the flooring specification stage, however the primary consideration for the Tarkett flooring was its durability in the hospital environment. We are responsible for the building for 30 years and the life cycle of its interior and exterior materials is a vital factor in the building's ongoing value."

Tarkett's Stacey-lee Smith said hospitals are faced with a delicate balancing act on the best ways to invest and manage available funds and that maintenance is one area that can offer enormous potential savings. "The choice of the right durable and easy-to-clean flooring offers significant savings in terms of energy, labour and the quantities of water and cleaning agents required over the product lifecycle," she said.

"All our vinyl solutions offer perfect smooth and impervious surfaces, with a limited number of thermal welded joints for easier and more efficient cleaning."

The company's Life Cycle Cost analysis shows that it is 10 times more expensive to clean and maintain the flooring in a public place (assuming it lasts 20 years), than the original purchase and installation costs.

"Over two years, this means that cleaning and maintenance costs as much as the flooring itself. Flooring treated with wax, polish or other surface treatments is labour intensive to maintain and ultimately less cost-effective over its lifetime than our alternatives. Stripping and polishing also have a negative environmental impact due to higher water and chemical consumption.

"Tarkett flooring's combination of high-quality raw materials and advanced surface treatments ensures the highest levels of durability. It also has excellent surface resistance properties, our Tarkett iQ range has auto-scrub or dry-buff restoration technology which means no wax or polish is required for the life of the product. "This guarantees that your floor will retain its good looks throughout an extended service life, backed by our extensive warranties for complete peace of mind."



Facility manager Spotless is responsible for maintaining all areas of the building, including cleaning. Spotless building manager, Luigi Caporlingua, said the vast majority of the hospital's floors are covered in Tarkett vinyl flooring.

Mr Caporlingua examined the Tarkett vinyl flooring specifications and cleaning requirements to ensure they met the hospital's required standards and also were compatible with its cleaning products and equipment. "We were satisfied that Tarkett's vinyl flooring products were appropriate for their applications within the hospital, which is important because the hospital receives a high amount of foot traffic and has a high-intensity cleaning regimen."

All floors in RAH are mopped daily and scrubbed weekly, with high-traffic corridors and infection-sensitive areas being mopped more frequently.

Spotless said it is conscious of the lifecycle of all materials in the building, including Tarkett flooring and has a lifecycle policy that extends to every element of the facility over a long period. Wear and tear of the flooring is regularly monitored. If it is spot-damaged, it can be fixed on-the-fly under the Tarkett warranty.

Another consideration in the specification of the Tarkett

vinyl flooring was its recyclability and that also that it fit with Spotless' overall life cycle analysis policy. According to RAH architects, Silver Thomas Hanley, said Tarkett's vinyl flooring products went through a significant amount of examination against the hospital's various criteria before being selected.

Because the new Royal Adelaide Hospital was designed and built with sustainability being an overarching consideration, Tarkett's sustainability credentials were a natural fit.

The hospital's environmental and sustainable approach focused and guided every facet of the building, from start to finish, with sustainability being a cornerstone for all stages and facets of the project – from how the site was excavated, to how the facility was constructed; to the internal fit-out, and ongoing facility maintenance. From a flooring perspective, the project required high-durability properties in the make-up of the vinyl flooring, which improves resistance to wear from marks and scratching, and improved facility cleaning.



Minimising joints provided flexibility for future replacement as required in high-use areas and improves hygiene and infection control by reducing the chance of organisms or dirt falling into cracks.

The Tarkett vinyl flooring range has helped realise the design intent of the hospital's interior colour scheme. Tarkett's Stacey-lee Smith said the practical applications of colour, pattern and texture are particularly important for flooring in healthcare facilities. "Flooring is not just a surface covering, it is a functional element of good interior design and can affect people in many ways, contributing to patient recovery and hospital staff efficiency," said Ms Smith.

"Flooring colours and patterns can provide a contribution to the wellbeing of patients at psychological and sensory level by creating a calming and reassuring atmosphere that promotes healing."

Green Building Council of Australia chief executive officer, Romilly Madew, reflected on the growing recognition that sustainable design can boost efficiencies in hospitals while also actively contributing to better patient outcomes. "Research from the World Green Building Council has shown that incorporating green design in hospital infrastructure can deliver 15 percent faster recovery rates, a 22 percent reduction in the need for pain medication and an 11 percent reduction in secondary infections," Ms Madew said.

Tarkett was one of the first flooring companies to recycle post-production waste, commencing its journey in 1957, and today remains the industry leader. "Our iQ range of vinyl flooring, for example, contains on average 25.5 percent recycled content consisting of post-production/post-installation waste and is 100 percent recyclable," said Ms Smith. "We also have iQ Natural, which is the benchmark in environmentally friendly flooring, with a new plasticiser based on oil from the *Ricinus communis* plant, and other natural fillers. Its natural and renewable content is 75 percent."