## Looks, Lighting And Long Life Among Benefits Of Concrete Parking Areas

Concrete offers several major advantages when it comes to the construction of parking areas, says The Concrete Institute's Managing Director, Bryan Perrie, a global authority on concrete industrial surfaces on the ground.

Perrie says, in the first place, maintenance costs of concrete parking areas are minimal with only some joint sealing and cleaning usually required annually. "Asphalt parking surfaces, on the other hand, need to be treated every few years and totally resurfaced at least every 10 years. Such maintenance work can be very disruptive to the operations of a commercial shopping complex or office block," he states.

Studies in the USA have shown that over a typical 20-year life of a parking area, concrete required very little maintenance expense while maintenance for an asphalt lot ended up as much as 80% of the initial construction cost. On a Florida, USA, project, an asphalt parking lot, in fact, ended up costing twice as much after 20 years than a similar concrete facility.

Lighting of the parking areas also can be reduced through the use of light-coloured concrete surfaces. It has been estimated that three of 10 light fixtures can be eliminated without losing the level of lighting in a parking lot when using light concrete surfaces. "With crime a constant problem in our country, the lighter concrete parking lots create safer storage of cars while reducing energy costs," Perrie explains.

The lighter coloured concrete also lowers temperatures in parking areas during the hot South African summers, and – by eliminating the 'heat island effect' - can even lower cooling costs for adjacent buildings.

Concrete parking areas – particularly those with brushed finishes - are more skidresistant and allow for easy installation of "rumble strips". Concrete pavements do not rut or develop potholes when carrying heavy loads.

"The environmental aspects of concrete parking lots should also not be overlooked," Perrie states. "The run-off is low in toxicity and cooler than from asphalt surfaces. Moreover, permeable interlocking concrete pavements substantially reduce run-off which overseas is now increasingly enforced through legislation. What's more, to add to the sustainability point of view, the concrete mix used for parking lots can include recycled materials such as slag, fly ash, and recycled concrete."

The practical considerations of laying the parking area also favour concrete: concrete pavements are built in one layer, usually on a sub-grade of compacted earth. Asphalt pavements, on the other hand, require an additional gravel or crushed stone base," Perrie points out.

"Then there's the question of appearance. The selection of concrete to pave a parking area offers the designer unlimited choices of texture, pattern, and colour for aesthetic

appeal; and the parking areas can be blended with adjacent greenbelts or equipped with water features. Large parking areas can be made more interesting through the use of colour, and colour can also be used to identify specific parking areas for buses, trucks and visitors' vehicles, as well as directional signs for pedestrians. Parking areas are more than just surfaces for cars. They serve as attractive welcome mats for offices, sports stadia, airports, shopping centres etc; and demonstrate quality to visitors – even before they walk through the front doors," Perrie contends.

ends