

# Green Star rating for office development

The Shepstone & Wylie office development.



The Shepstone & Wylie office development, situated in the prestigious Ridgeside Office Park in Umhlanga, KwaZulu-Natal, is the new head office for this highly respected firm of attorneys and has already been awarded a Four Star Green Star SA – “Office Design” accreditation by the Green Building Council of South Africa. The building is now also the first building in KwaZulu-Natal, and only the second in the country, to have achieved a Green Star SA – “As Built” rating.

In order to achieve this rating, the building had to be designed and built in line with strict requirements to ensure its on-going environmental, social and economic sustainability. The building is in keeping with the design principles of creating an innovative and environmentally-sustainable design – contributing towards establishing a business park of excellence and distinction.

Aurecon was appointed as the green building consultant and mechanical engineer and worked closely with the architect to design a sustainable building envelope.

The integration of ecologically sustainable design (ESD) concepts, from the inception of a project through to design, construction, operation and ultimately decommissioning, offer an opportunity to demonstrate whole-life benefits for users of a facility and the wider community.

Aurecon's holistic approach to building facilitates the integration of sustainable development, civil and mechanical engineering, building planning and more efficient designs to produce better buildings.

The building features a variety of ecology-conscious considerations, including the built form, waste recycling, efficient use and recycling of water, irrigation and energy management. Natural lighting and views were key elements in the design of the building and this was achieved by capitalising on the orientation of the site and the magnificent uninterrupted sea views.

Coupled with using the principles of environmentally-sustainable architecture,

Aurecon's holistic approach allowed the professional team to create a high quality, functional and healthy working environment.

Other green measures incorporated in the design include:

The structure consists of insulated cavity walls, an insulated roof and double-glazed windows.

Passive climatic control elements, as well as energy-saving design, have been implemented where possible in keeping with the principles of sustainable architecture.

The building's temperature is regulated by a mechanical air-conditioning system, which uses chilled water to assist the ice storage system with individual air handling. In addition, dedicated outside air plants and energy wheels are linked to an air-cooled chiller, as well as constant-volume primary and variable-volume secondary chilled water pumps.



Low energy consumption lamps have been used extensively in the design, accounting for 98% of the light fittings.

“An energy-efficient building which promotes a healthy working environment has been created in the finished product of the Shepstone & Wylie building. It also has a minimal impact on the surrounding biophysical environment,” Aurecon's project manager, Richard Humphrey, commented.

The professional team on the project included Ridgeside Office Park Portion 8 (Pty) Ltd (developer), Maponya Developments (project managers),

Evolution (architects), GOBA (structural engineers) and Aurecon (green building consultants, HVAC, electrical and wet services).

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