



SANDTON GATE PHASE I

Erf 180, Glenadrienne Township, William Nicol Drive, Sandton

5 Star Green Star – Office Design v1.1



AFRICA
South Africa

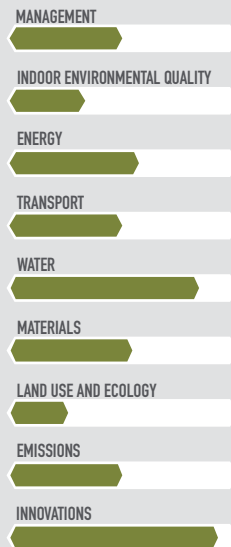
Office Design v1.1



TOTAL POINTS:

61

CATEGORY SCORES:



Sustainable building features include:

Energy Saving Initiatives

- Sub-metering of major energy consuming systems is in place. Gathering information is key to understanding and managing building systems and to assess opportunities for energy savings.
- Minimisation of Greenhouse Gas Emissions associated with operational energy consumption is reduced. An energy model of the building was generated and in the design stages of the building compared to a notional building model. The building design showed an improvement over a SANS 10400 notional building. The building is designed to achieve an energy consumption of approximately 209.5 kWh/m²/annum which amounts to over a 60% improvement of energy use when compared to the notional building. Potential carbon saving of 251.4 kgCO₂ per year compared to a notional building.
- Provision is made to ensure all individual spaces or enclosed spaces are individually switched with occupancy sensors. This will offer greater flexibility for light switching, making it easy to light only occupied areas.

- The office lighting design ensures the use of artificial lighting with minimal energy consumption as the energy use of 2 W/m² per 100 Lux was set for the office lighting power densities.

- A high level of thermal comfort is ensured by addressing the internal operative temperatures through modelling and ensuring they are within the ASHRAE Standard 55-2004 Acceptability Limits for at least 98% of occupied hours.

Environmental Initiatives

- All selected gaseous and fire suppression systems and thermal insulants used for the development have an Ozone Depleting Potential (ODP) of zero, to eliminate any contributions to long-term damage to the earth's stratospheric ozone layer.
- A project specific Environmental Management Plan was developed and implemented throughout the duration of construction to establish guidelines to follow to minimise the environmental impact associated with construction activities.

- A project specific Waste Management Plan was developed and implemented to minimise the contribution of waste going to landfill. And reduce the environmental impact of the project.

Water Saving Initiatives

- The water system is estimated at saving approximately 30% saving translating to approximately 2742.153kl of water saved per annum.
- The building achieves a savings through the use of water efficient fittings that limit the occupant water usage.
- Sub-metering of major water consuming systems is in place. Gathering information is key to understanding and managing building systems and to assess opportunities for water savings.
- The building is designed to reduce the consumption of potable water for the building's fire protection and essential water storage systems.

PROJECT TEAM:

OWNER/DEVELOPER

Abland & Tiber

ARCHITECTS

Boogertman and Partners

ELECTRICAL ENGINEER

CKR Consulting

FIRE ENGINEER

IFESA

TRANSPORT ENGINEERS

Kantey & Templer

MECHANICAL ENGINEER

C3 Climate Control Consulting Engineers

STRUCTURAL/CIVIL ENGINEERS FOR THE PRECINCT

Kantey & Templer

QUANTITY SURVEYORS

Quanticost

STRUCTURAL/CIVIL ENGINEERS FOR THE BUILDINGS

L&S Consulting

LANDSCAPE ARCHITECTS

Landmark Studios

SUSTAINABLE BUILDING CONSULTANT

Solid Green

WET SERVICES

CKR Consulting

MAIN CONTRACTOR

Tiber

PROJECT MANAGER

Abland

FLOOR AREAS:

TOTAL GROSS FLOOR AREA (GFA):

17,660 m²

TOTAL GROSS COMMERCIAL OFFICE AREA:

15,181 m²

CAR PARKING AREA:

25,530 m²