



LAKEVIEW PHASE II OFFICE PARK

16 Constantia Blvd., Constantia Kloof, Roodepoort, 1709

4 Star Green Star – Office Design v1.1



AFRICA
South Africa

Office Design v1.1
★★★★★
4 Star Rating
Best Practice
CERTIFIED MARCH 2018



TOTAL POINTS:

53

CATEGORY SCORES:

MANAGEMENT

INDOOR ENVIRONMENTAL QUALITY

ENERGY

TRANSPORT

WATER

MATERIALS

LAND USE AND ECOLOGY

EMISSIONS

INNOVATIONS

Sustainable building features include:

Energy:

- Using energy modelling an annual benchmark for energy consumption has been set a 160 kWh/m² per annum. The project has achieved an 45% improvement over SANS 204 Notional Building model.

- 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. The behaviour of occupants and users of the building are critical to reduce the energy consumption of the 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 project saves energy by providing office lighting that is not over designed. This is achieved as the office lighting design achieves an average maintained illuminance level of more than 400 Lux.

- 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.

Indoor Environmental Quality:

- 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.

- Tobacco smoke is prohibited inside the building to ensure air quality benefits to the building occupants.

- 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:

- The building achieves a savings using water efficient fittings that limit the occupant water usage to 0.39L/day/m².

- 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.

- The development is designed to minimize storm water run-off and minimize the pollution of the natural watercourses.

PROJECT TEAM:

OWNER

Abland

ACCREDITED PROFESSIONAL

Solid Green Consulting

ARCHITECT

MWLF Architects

ELECTRICAL ENGINEER

Claassen Auret

FIRE ENGINEER

IFSA International Fire Engineering

LIFT SPECIALIST

Quality in Motion

MECHANICAL ENGINEER

Spoormakers and Partners

QUANTITY SURVEYORS

Quanticost

STRUCTURAL / CIVIL ENGINEERS

WSP

SUSTAINABLE DESIGN REVIEW

Solid Green Consulting

SUSTAINABLE BUILDING CONSULTANT

Solid Green Consulting

WET SERVICES

MWLF Architects

MAIN CONTRACTOR

Tiber

PROJECT MANAGER

Abland

LANDSCAPE ARCHITECT

Connie Pretorius Landscaping

IRRIGATION CONSULTANT

Controlled Irrigation cc

CLIENT

Nedbank

FLOOR AREAS:

12,542.58 m²

12,542.58 m²

12,879.82 m²

TOTAL GROSS
FLOOR AREA
(GFA):

TOTAL
COMMERCIAL
OFFICE AREA:

CAR
PARKING
AREA: