112 OXFORD STREET, BUILDING 3 & 4

Building 3 and 4, Oxford & Glenhove, 112 Oxford Rd, Rosebank, Johannesburg, 2196

4 Star Green Star – Office Design v1.1

greenstar AFRICA South Africa

Office Design v1.1
★★★★
4 Star Rating
Best Practice
CERTIFIED MAY 2020

GREEN BUILDING COUNCIL SOUTH AFRICA

112 Oxford Street, Building 3 & 4 developed by Barrow, committed to design and develop the project to meet the 4 Star Green Star SA Office v1.1 Design certification requirements. 112 Oxford Street, Building 3 & 4 consist of 2 buildings, each targeting the same 4-star design rating as part of a multiple building certification. The project is located in Rosebank, Johannesburg.

Sustainable building features include:

- **Some energy, water and environmental initiatives Include:**
  - 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 demonstrated an improvement over a SANS 10400 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 less than 1.5 W/m^2 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.
  - 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.
  - Evaporative cooling towers or other evaporative cooling systems that creates the risk of legionella disease are eliminated from the design of the building.
  - The building achieves a savings using 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.
  - Potable water consumption for landscape irrigation has been reduced through smart metering and selection of waterwise plants.
  - The project achieved innovation points for a GSSAAP Team- where 5 professional team members and 4 members of the main contractor has successfully completed the online Green Star New built course. Ensuring an enhanced understanding of the green star rating tool.

TOTAL POINTS:

47

CATEGORY SCORES:

PROJECT TEAM:

OWNER
Barrow Construction (PTY) Ltd

ACCREDITED PROFFESSIONAL
Solid Green

ARCHITECT
LYT Architects

ELECTRICAL ENGINEER
One Zero Consulting

FIRE ENGINEER
TWCE Fire Protection Engineers

LIFT SPECIALIST
Kone

MECHANICAL ENGINEER
Adaptive Resources Engineers

QUANTITY SURVEYORS
Barrow Construction (PTY) Ltd

STRUCTURAL ENGINEERS
Kantey & Templer

SUSTAINABLE DESIGN REVIEW
Solid Green

SUSTAINABLE BUILDING CONSULTANT
Solid Green

WET SERVICES
Sutherland Engineers

MAIN CONTRACTOR
Barrow Construction (PTY) Ltd

PROJECT MANAGER
LYT Architects

FLOOR AREAS:

	BUILDING 3	BUILDING 4
TOTAL GROSS FLOOR AREA (GFA):	7,115 m^2	3,884 m^2
TOTAL COMMERCIAL OFFICE AREA:	7,115 m^2	3,884 m^2
CAR PARKING AREA:	12,539 m^2	7,124 m^2