



# In Keeping

**Number 4 Stan Road is a slick, sculptural eight-storey building in the heart of Sandton.**

**T**he project's context was an important consideration in developing the design as it is bordered by complexes of residential towers on three sides, with a large office development between the site and the very busy Grayston Drive.

The original single-storey building, constructed in 1991, was thus being dwarfed by massive developments, and could no longer accommodate the growing needs of its occupants.

## West and North

Architecturally, the building has two distinct aspects. The street façade on Stan Road is west-facing and is treated as a solid face with massive full height fins behind which thin slivers of glazing peep southwards over the rooftops of Sandton. In this way the design manages the typical heat build-up of a west-facing façade and controls the associated glare issues.

The north-facing façade is fully glazed, opening up

the office spaces to views across Bryanston towards the Magaliesberg, with external views provided for over 80% of the usable floor area. Shading screens along the northern façade, together with the glazing type and glazing ratio, ensure that adequate levels of thermal comfort are met while respecting budget constraints and aesthetic requirements.

## Break-away

Parking is provided in excess of the minimum statutory requirement for offices, and is accommodated in a podium structure with a generous landscaped sky deck onto which the offices open. All parking areas are thus above ground and naturally ventilated and illuminated. The top of the parking podium forms a landscaped break-away exterior deck for the building's users, with large-scale indigenous trees. The podium itself is clad with recycled security grilles from the original building, which have been fitted with planters at each floor level in order to eventually create a 'green wall'.

Cyclist facilities, including 23 secure bicycle storage spaces, showers, change rooms and lockers are provided in the building to allow building users to cycle or even run to work.

**An automated system which will enable easier collecting, monitoring and recording of data as well as alert to irregular trends in consumption**



## OFFICE DEVELOPMENT

Energy efficient lighting is used throughout the building; and two efficient air cooled chillers are used with two Variable Air Volume (VAV) air handling units per floor to provide efficient cooling of the building. In terms of indoor environmental quality (IEQ), fresh air is provided at over 12.5l/s/person which results in a high level of fresh air far exceeding the SANS standard of 7.5l/s/person.

### Thirty percent

The choice of materials further contributes to occupant wellness in that paints, adhesives, sealants and carpets all have volatile organic compound (VOC) limits that fall within the Green Star allowance.

Carbon emissions have also been reduced through the use of more than 60% total recycled content of all steel used in the project; a reduction in the absolute quantity of Portland cement by over 30% across all concrete mixes used during construction; and by reducing the use of PVC by more than 30% on the project through the use of alternative products.

### Building tuning

Water efficient sanitary fittings have been used to reduce the predicted potable water consumption. This is done by limiting wash hand basin flow rate to 5l/min, and urinals to 0.9l/flush. Toilets have dual flush mechanisms, and shower heads have a 9l/min flow rate. Limited landscaping has been provided, further decreasing the demand for potable water used for irrigation.

Sub-metering of both water and energy is provided for. These are connected to an automated system which will enable easier collecting, monitoring and recording of data as well as alert to irregular trends in consumption.

Building tuning post-occupancy is a contractual requirement between the building owner and the various consultants and contractors (electrical, mechanical, irrigation, lifts), and this process is currently underway.

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