



**AL TSA**

Leading with LED

LED Lighting Replacement Project  
at 42 Netcare Hospitals

*Across 4 provinces*

**CASE STUDY**



You're in safe hands

## Healing light. AL TSA helps Netcare hospitals light the way to optimal healthcare

### Introduction

In South Africa, Netcare operates the largest private hospital, primary healthcare, emergency medical services and renal care networks. In addition to its world class hospital services, the Group offers primary healthcare, sub-acute care, day surgery, occupational health and employee wellness services. The Netcare group are also committed to environmental sustainability.

In line with their sustainability goals, Netcare partnered with AL TSA to upgrade their existing lighting to a more effective and energy efficient system.

### Project Objectives

A hospital environment requires diverse and very specific types of lighting for different areas. AL TSA was tasked with enhancing the quality of lighting across all areas to improve visual effectiveness for healthcare staff as well as the comfort of patients and visitors. It was also important to comply with all lighting standards and regulations. Netcare's aim was to improve the overall sustainability of their hospitals while, at the same time, reducing their energy consumption and operating costs and limiting their environmental impact.

Critical to the success of the project was that new installations had to integrate seamlessly with the existing infrastructure and that there would be little or no disruption to the daily function of the hospital.

PROJECT



# CHALLENGES

## Challenges

Staff and patient safety. It was imperative that the hospital remained fully functional during installation. Therefore, it was critical to ensure the safety of all patients and staff while the work was in progress.

Complex lighting requirements. Healthcare facilities have very specific lighting needs in various areas, such as surgical suites, patient's rooms and diagnostic areas, as well as offices and waiting rooms. The challenge was to select the best fixtures and design to ensure optimal lighting while adhering strictly to healthcare regulations.

Multiple stakeholders. There are many different departments in a hospital, including administration, clinical staff and infection control, each with their own requirements. Therefore, to ensure a smooth implementation of the planned lighting changes throughout the hospital, it was critical to coordinate between all the various stakeholders to address their concerns and manage expectations.

The project was effectively managed and completed in two phases. AL TSA successfully upgraded 42 facilities and ensured each facility stayed functional and operational during the upgrade. Kudos to the AL TSA team for their tireless work ethic and professionalism.

Johan Durant  
Netcare Sustainability Manager  
Netcare, South Africa





## Planning Phase

Overcoming challenges and ensuring a smooth, professional implementation requires careful planning.

ALTSA's planning included the following:

**Assessment and audit.** ALSTA began by conducting a comprehensive assessment of the hospital's existing lighting, across 30 sites country-wide. This included an evaluation of the current fixtures, lighting levels, energy consumption and maintenance requirements. The assessment also provided insights into areas that needed improvement as well as providing a baseline from which to plan improvements.

**Stakeholder engagement.** To ensure optimal lighting conditions, key stakeholders, such as hospital administration staff, healthcare professionals and maintenance staff were all involved in the planning process. This gave ALTSA the opportunity to gather information about their requirements, address any concerns and gain support for the project. Patients were also consulted and their perspectives were taken into consideration in the project plan.

**Budgeting and financing.** A detailed budget was developed, which covered the costs of various LED fixtures, installation, infrastructure upgrades and the disposal of old fixtures. Potential financing options were included. The budget also covered available incentives, such as government grants. Energy-efficiency programs were explored to optimize the project's financial feasibility.

## Implementation Phase

**Fixture selection and design.** LED fixtures were carefully selected based on lighting requirements specified by each of the hospital's various departments. The selection was based on energy efficiency, color rendering, and compatibility with healthcare standards. Special consideration was given to operating theatres, treatment areas, patient's rooms, corridors and waiting areas.

**Installation.** The project team collaborated with qualified and experienced electricians, contractors and lighting specialists to develop a comprehensive installation plan. The plan included timelines, phasing strategies, and contingency measures to ensure little or no disruption to the functioning of the hospital. ALTSA conducted frequent oversight visits at every step of the installation process to ensure that the work was done correctly and according to specification.

**Commissioning and testing.** After installation, rigorous testing and commissioning processes were performed to verify the functionality, lighting levels and color consistency of all fixtures. Checks were carried out to ensure that the entire installation complied with all safety regulations and standards.



## Outcomes and Benefits

**Enhanced lighting quality.** The LED lighting replacement significantly improved lighting quality throughout the hospital. The LED replacement also created a better color rendering, reduced glare, and improved uniformity. This resulted in a considerable improvement in visibility, patient comfort and healthcare staff satisfaction.

**Energy and cost savings.** The project achieved substantial energy savings, reducing Netcare's electricity consumption and operational costs. LED fixtures have a longer lifespan. This results in considerably reduced maintenance, which leads to additional cost savings over time.

**Environmental impact.** The reduced energy consumption and dramatically lowered carbon footprint aligned with Netcare's sustainability goals and environmental responsibilities.

**Compliance with standards.** The LED lighting system met all lighting standards and regulations specific to healthcare facilities, thereby ensuring patient and staff safety, as well as regulatory compliance.

**Improved staff experience.** The upgraded lighting system positively impacted the overall staff and patient experience by providing a more effective work environment for staff and a more welcoming and comfortable environment for patients.



# 225 943

### LUMINAIRES

INSTALLED FROM OUR INDOOR AND OUTDOOR COMMERCIAL RANGE

# 3 Years

### TIMELINE

EFFICIENT PROJECT PLAN ENSURED OUR TEAMS INSTALLED ON SCHEDULE

# 42

### HOSPITALS

WITH A WIDE RANGE OF SITE LOGISTICS AND INSTALLATION REQUIREMENTS

## Results Summary

### Energy Savings

We achieved a significant energy savings from the entire project.

### Financial Benefits

Netcare achieved a significant annual saving on electricity and maintenance, resulting in a satisfactory ROI.

### People Benefits

The quality of lighting, along with higher lux levels, is known to promote health, healing and wellbeing. Better lighting also aids concentration and increases visual comfort. The LED installation at Netcare contributed significantly to all areas, including improved aesthetics.



## AL TSA LED Lighting Solutions

The following superior quality, energy efficient, LED Lighting Solutions were used to transform Netcare's manufacturing facility.

1.



AL TSA GU10 Spotlights

2.



AL TSA LED Tubes

3.



AL TSA Brilliance Down

4.



AL TSA Hyundai Fitting

5.



AL TSA LED Bulbs



CONTACT



## Guarantee

We have the utmost confidence in our quality and expertise ensuring we deliver every time and our 5 Year Guarantee comes standard on:

- Our LED Lighting Solutions
- Compliant Lux Levels
- Our Installations



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## Contact us

We look forward to partnering with your business as we lead the way with LED.

AL TSA Representatives

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