



Nakheel Warsan Phase 2 – Retail and Apartment G+3, Building A&B at WV-M-01-A, DUBAI, UAE

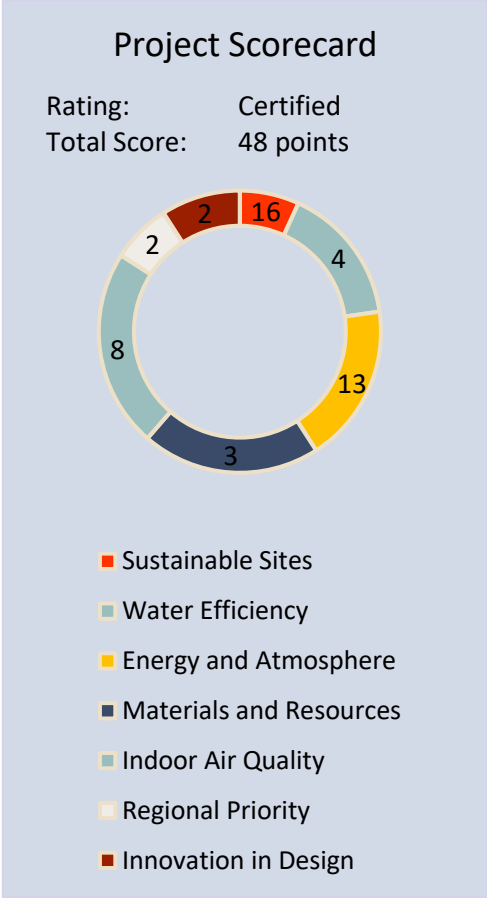
Trakhees-EHS In-House Certification Fact Sheet

Project Brief

Warsan Village – Phase 2 development by Nakheel, consists of 2 nos. of buildings (A and B) located in plot WV-M-01-A, Dubai. This building consists of apartment (G+3) and retail units and has a total built-up area of 48,064 m².

Platinum Sustainable Development International were entrusted to meet the sustainability requirements for the project.

The key sustainability goals for the project were to be energy efficient, have low operating costs and provide a healthy indoor environment for its occupants. Through meticulous approach implemented by the project team, the project was able to achieve - Trakhees In-House Certified rating level.



- Platinum’s work for the project included:**
- Green Building Facilitation (Design and Construction)
 - Independent Commissioning services
 - Energy Modeling services



Overview of Key Green Building Features

Energy Efficiency

Platinum's team facilitated various design charrettes with Client, Architects & MEP Engineers, to ensure the green building requirements and high-performance features are effectively incorporated for the project.

By carrying out energy modeling simulation and analysis, various energy conservation measures were explored. These measures were further optimized, to ensure the project was 23% more energy efficient when compared to ASHRAE standards. This was achieved by:

- Insulated wall and roof elements with U- value of 0.28 W/m²k and 0.27 W/m²k respectively
- Thermally efficient glazing units with U- value of 1.78 W/m²k F and 0.24 SHGC
- Installation of energy efficient water-cooled centrifugal chillers
- Energy efficient LED Lamps



Water Conservation

On water management front, features considered were:

- Selection of water efficient fixtures like ultra-low flow mixers, urinals and water closets, by which the overall fresh water consumption was reduced by 32%
- More than 70% of potable water savings in irrigation were achieved, through use of drip irrigation technologies and by planting native / adaptive plants

Enhanced Indoor Environment

- To promote occupant well-being, low VOC contents paints, coatings, adhesives and sealants were used
- To ensure airborne contaminants are adequately removed, all fresh air handling devices are equipped with ultra-efficient MERV 13 rated air filters
- By ensuring ventilation systems are compliant to ASHRAE 62.1 standards, optimum thermal comfort level was achieved for occupant well-being

Building Materials, Construction Practices & Green Features

- Construction practices were enhanced by proper implementation of construction activity pollution prevention measures, waste management methods and indoor air quality measures
- To promote resource efficiency, 11% of the materials used in the project, included a combination of post-consumer and pre-consumer recycled content
- To reduce carbon footprint and to enhance local economy, 48% of the materials used in project, were regionally sourced
- Heat island effects were reduced by the use of high SRI value materials on roof, while 100% of the car parking space used interlock pavers having SRI value of 38
- To encourage sustainable transportation means, provisions were made for preferred car parking and carpool vehicles
- Environmental impacts from the operational wastes are being minimized by providing separate spaces for storage & collection of recyclables