

DAMAC GHALIA TOWER, Plot JVC18TCP011, DUBAI, UAE

Trakhees-EHS In-House Certification Fact Sheet

Project Brief

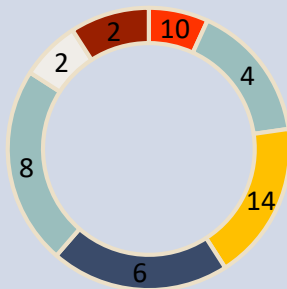
Ghalia Tower is a residential development by DAMAC, located at JVC18TCP011, Dubai. Total built-up area for the building is 80,765 m².

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.

Project Scorecard

Rating: Certified
Total Score: 46 points



- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Air Quality
- Regional Priority
- Innovation in Design

Platinum's work for the project included:

- Green Building Facilitation (Design and Construction)
- Independent Commissioning services
- Energy Modeling services



Platinum Sustainable Development International

Green Buildings | Estidama | LEED | Al Sa'fat | Building Commissioning | Environmental Services
Waste Management | Envelope Testing | Acoustics | Energy Audits | Renewable Energy

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 **29% more energy efficient** when compared to ASHRAE standards. This was achieved by:

- Insulated wall and roof elements with U- value of 0.091 Btu/hr ft² F and 0.050 Btu/hr ft² F respectively
- Thermally efficient glazing units with U- value of 0.29 Btu/hr ft² F and 0.19 SHGC
- Installation of energy efficient Fan Coil Units and Fresh Air Handling Unit
- Energy efficient LED and CFL lamps



Water Conservation

On water management front, features considered were:

- Selection of water efficient fixtures like low flow Bathroom Mixers, low flow Kitchen Sink and Dual Flush Water Closets, by which the overall fresh water consumption was reduced by 33%
- More than 65% 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, 21% 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, 41% of the materials used in project, were regionally sourced
- More than 50% of construction wastes generated were re-used / diverted from landfill, by adopting efficient waste management strategies.
- Heat island effects were reduced by the use of high SRI value materials on roof and by having 100% of the covered car parking spaces
- 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