

Fire & Police Station



FAST FACTS & BENEFITS

CED Trakhees Certified Green Building
 Built up Area: 6007.0 m²
 Plot of Land No: PJTRFS01

23.80% Savings on Energy Use
50.42% Savings on Potable Water Use
10.02% Materials Use with Recycled Content
43.60% Regional Materials Use

PROJECT BACKGROUND

A new resolution on the implementation of green building specifications and standards in the emirates of Dubai has been issued by H.H. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of UAE and ruler of Dubai. As per the new resolution, effective on January 2008, all owners of residential and commercial buildings and properties in the emirates of Dubai must comply with the internationally recognized environment friendly specifications to turn Dubai into a sustainably developed city that meets the demands of best practices and benchmarks of environment friendly growth pattern.

In response to this resolution, we are proud to inform that the "Fire & Police Station Building at Plot of Land No. PJTRFS01, Palm Jumeirah, Dubai" has been awarded with Green Building Certification established by TRAKHEES.

The Owner of this project Nakheel decided to target GB certification during the design stage. The project is a Fire & Police Station Building at Plot of Land No. PJTRFS01, Palm Jumeirah, Dubai, UAE. The approximate Built up area of the project is 6007 m². Design development and construction completion happened during the period of 2018-2021. The building uses energy from electricity and uses water from a municipal potable water system.

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PROJECT PROFILE

SUSTAINABLE SITES AND TRANSPORTATION

- ❖ Provides preferred parking for carpool
- ❖ Roofing materials meet the SRI requirement avoiding heat island effect
- ❖ Project located in Development density area.

ENERGY, WATER AND MATERIAL RESOURCE CONSERVATION

DAR as a Sustainability Consultant has created an energy model to evaluate the effectiveness of the building's energy conservation measures, in compliance with ASHRAE Std. 90.1-2007 Appendix G methodology.

The following are the Energy Efficiency Measures incorporated in the project:

- ❖ Giving the right orient for the building reducing the solar heat gain
- ❖ Highly insulated building envelope elements
- ❖ Efficient lighting design and controls with optimal power density
- ❖ Efficient HVAC systems
- ❖ Conducted enhanced commissioning to ensure results of holistic building energy system design

The following are the water and resource conservation measures incorporated in the project:

- ❖ Uses low flow fixtures in faucets, sinks and showers and dual flush water closets
- ❖ Incorporated recycled content in the building materials
- ❖ Boosting the local market and reducing the foot miles by purchasing more regional materials

INDOOR ENVIRONMENTAL QUALITY

- ❖ The IAQ performance complies with the minimum requirements of ASHRAE Std 62.1-2007
- ❖ Installed air flow monitoring device for mechanical ventilation to monitor the fresh air
- ❖ Developed and implemented a Construction Indoor Air Quality (IAQ) Management Plan in reference to SMACNA guidelines
- ❖ Use of building finishes materials with low emission of volatile organic compounds (VOC) for adhesives, sealants, paints and coatings.

THE TEAM

Owner	Nakheel
Main & GB Consultant	DAR Al Handasah Consultants
Contractor	GBH International Contracting L.L.C
Commissioning Authority	Susnomics Engineering Systems FZ-LLC Dubai, UAE