

PANASONIC AVIONICS OFFICE BUILDING AT DAFZA, DUBAI



FAST FACTS

Project: Panasonic Avionics, Plot No W-73 at DAFZ, Dubai, UAE
LEED Certification Level: Platinum, New Construction (NC) V3
Gross Floor Area: 185,637 sq ft / Office Building
Neighborhood: Dubai Airport Free Zone, UAE
Completed: March 2014
Date of Certification: 22 November 2014

BENEFITS

- 37.05 % Overall Savings on Energy Use
- 12.24 % Renewable Energy Savings from Solar PV and Solar Hot Water
- 21.32 % Savings on Potable Water Use by Water Fixtures
- 33.59 % Materials Used with Recycled Content
- 42.70 % Regional Materials Use
- 78.49 % Diverted on-site generated construction waste from landfill

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 Makhtoum, 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 healthy city that meets the demands of best practices and benchmarks of pollution-free sustainable development.

In response to this resolution, we are proud to inform that "**Panasonic Avionics**" has been awarded with Prestigious **LEED PLATINUM Certification** established by the U.S. Green Building Council(USGBC)

Panasonic Avionics— is a new construction Facility Complex project comprises of B+G+3+R with a total gross floor area of 185,637 sq ft and conditioned area of 132,884 Sq.ft. The building use would be to facilitate, repair and overhaul in-flight entertainment system and harness cables. In conformity with Sustainable Vision of Dubai through a wiser use of natural resources, Panasonic avionics Corporation is contemplating a city wide sustainability program.

LEED POINT SUMMARY

80 out of 110

80 Points Achieved 110 Points Available

Sustainable Sites	24	26
Water Efficiency	6	10
Energy & Atmosphere	24	35
Materials & Resources	6	14
Indoor Environmental	10	15
Innovation & Design	6	6
Regional Priority	4	4



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SUSTAINABLE SITES & WATER EFFICIENCY

The project team sought to encourage sustainability. The following are strategies to support it:

- The Project was developed near urban areas with existing infrastructure.
- Provides preferred parking for carpool and low-emitting and fuel-efficient vehicles on-site
- High SRI value for Roofing material
- 100% of the car parking area are covered
- Installed water efficient landscaping
- Installed efficient water fixtures which consume less amount of potable water.
- Installed grey water recycling plant

ENERGY EFFICIENCY

Project is designed as per ASHRAE Std. 90.1-2007 and following are the Energy Efficiency Measures incorporated in the project:

- Highly insulated mass Wall and Roof
- Optimized Glazing
- Efficient lighting and incorporating motion sensors and timer control for the internal and external lighting
- Efficient HVAC systems – Efficient Air Cooled Chillers and VAV driven AHUs
- Installation of Solar Photovoltaics and Solar Water Heater
- Incorporating Building Management Systems to provide full automatic control for HVAC and Lighting

MATERIAL AND RESOURCES

- 78.49% (by weight) of the construction waste diverted from landfill.
- 33.59% of construction material used has recycled content.
- 42.7% of construction material are regional materials – means those materials which are within 500miles radius from the Panasonic DAFZA Site
- Provides appropriately sized dedicated areas for the collection and storage of recycling materials

INDOOR ENVIRONMENTAL QUALITY

- The IAQ performance complies with the minimum requirements of ASHRAE Std. 62.1-2007,
- Installed air flow monitoring device for each 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 VOC for adhesives, sealants, paints and coatings
- Individual lighting controls, 93.11% of building occupants
- Project space is in compliance with ASHRAE Standard 55-2004.

OTHER GREEN FEATURES INCLUDES

- Earned an exemplary performance in with Regional Construction Materials Use, Heat Island Effect for all Covered parking, and Maximize Open Space.
- Provided Green Education Program on Panasonic Website and Green Cleaning Program

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THE TEAM

Owner: **Panasonic Middle East and Al Tayer Group (ATG)**

Owner Representative: **Aeroports De Paris Group (ADPI)**

Design Consultant: **Orion Engineering Consultants**

Contractor: **Fujairah National Construction CO. L.L.C. (FNC)**

Green Building Consultant: **Middle East Centre for Sustainable Development (MECSD), Dubai, UAE**

Commissioning Authority: **Pacific Control Systems**

LEED APs: **Mr. Thom Bohlen, Mr. Loveleen Raval and Ms. Mary rose Anlacan**