JTS Workshop Survey Shed Office and Utility, DUBAI

58		110
SUSTAINABLE SITES	15	26
WATER EFFICIENCY	8	10
ENERGY AND ATMOSPHERE	16	35
MATERIALS AND RESOURCES	4	14
INDOOR ENVIRONMENTAL QUALITY	7	15
INNOVATION IN DESIGN	4	6
REGIONAL PRIORITY CREDITS	4	4

Points Achieved Points Available

FAST FACTS

LEED Certification: Silver, New Construction V3
Area: 7,806 ft^2 / Office and Industrial Building
Neighborhood: Jebel Ali Free Zone South, UAE
Construction Cost: $55.4 / ft^2
Completed: Aug 2012
Date of Certification: Aug 2012

BENEFITS

32.19% Savings on Energy Use
42% Savings on Potable Water Use
20.3% Materials Use with Recycled Content
82.31% Regional Materials Use
55.26% Savings on Irrigation Water Use
50.5% reduction in sewage conveyance

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 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 "**JTS Workshop Survey Shed Office and Utility, DUBAI**" has been awarded with Prestigious LEED Silver Certification established by the U.S. Green Building Council and verified by the Green Building Certification Institute (GBCI).

In 2010, management took a decision to relocate the operations to a bigger place to keep phase with the growing demand of the chemical industry in the Middle East region. Construction of the new facility in Jebel Ali South Zone was started in August 2011 and completed in April 2012. Operation in the new site has started effective mid of May 2012.

JTS Workshop Survey Shed Office and Utility, DUBAI is a new construction Facility Complex project which is comprises of Workshop, Warehouse and Office. The Project building was decided to target LEED certification during the design stage in 2010. Design development and construction completion happened during the period 2011-2012 finally achieving the target in 2013. Plot area of the project is 206,437.6 ft^2. There are zero floors above grade and zero floors below grade (excluding parking levels).The building uses energy from electricity and uses water from a municipal potable water system.

Global Engineering Systems FZC
P6-73 | SAIF Zone | P.O. Box 7913 | Sharjah | U.A.E.
Tel : + 971 6 5571129 | Fax : + 971 6 5571309 | E-mail : mail@environment.ae | www.environment.ae

JTS Workshop Survey Shed Office and Utility, DUBAI

PROJECT PROFILE

SUSTAINABLE SITES AND TRANSPORTATION

- Provides 2 shuttle bus services for public transportation access
- Provides Bicycle Storage and Changing Rooms
- Provides preferred parking and low-emitting and fuel-efficient vehicles on-site
- Provides car/van pool parking
- 67% of the building on-site parking is located underground or under cover
- Roofing materials meet the SRI requirement avoiding heat island effect

ENERGY, WATER AND MATERIAL RECOURSE CONSERVATION

Global Engineering Systems FZC as a Sustainability Consultant for **JTS Workshop Survey Shed Office and Utility, DUBAI**, 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
- Optimized glazing and incorporation of skylights in the warehouse and workshops
- 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
- Uses dual flush water closets
- Incorporated native adaptive vegetation and micro controlled irrigation
- 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 62.1-2004
- Installed air flow monitoring device for each mechanical ventilation to monitor the fresh air
- Installed CO_2 sensors to monitor the carbon dioxide concentration in the densely occupied spaces
- 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
- Had installed carpet which is CRI certified

THE TEAM

Owner: Joint Tank Services FZCO
Design Consultant: Pax-Kent International
Contractor: SAM Building Contracting LLC
Green Building Consultant: Global Engineering Systems FZC Dubai, UAE
LEED AP: S. Nagarajan, Shyam Chandra V
Commissioning Authority: Global Engineering Systems FZC Dubai, UAE

JTS Workshop Survey Shed Office and Utility, DUBAI

LEED
SILVER

JOINT TANK SERVICES FZCO
DUBAI
Jebel Ali Free Zone, United Arab Emirates

HAS FULFILLED THE REQUIREMENTS OF THE FOLLOWING LEVEL OF CERTIFICATION ESTABLISHED BY THE U.S. GREEN BUILDING COUNCIL IN THE LEED GREEN BUILDING RATING SYSTEM™ AND VERIFIED BY THE GREEN BUILDING CERTIFICATION INSTITUTE.

LEED FOR NEW CONSTRUCTION

SILVER

August 2013

S. RICHARD FEDRIZZI, PRESIDENT & CEO
U.S. GREEN BUILDING COUNCIL

MAHESH RAMANUJAM, PRESIDENT
GREEN BUILDING CERTIFICATION INSTITUTE