

CHINA NATIONAL BUILDING MATERIAL-JAFZA



	61	110
SUSTAINABLE SITES	16	26
WATER EFFICIENCY	6	10
ENERGY AND ATMOSPHERE	18	35
MATERIALS AND RESOURCES	4	14
INDOOR ENVIRONMENTAL QUALITY	8	15
INNOVATION IN DESIGN	5	6
REGIONAL PRIORITY CREDITS	4	4

Points Achieved
 Points Available

FAST FACTS

EHS Green Building Certified

Area: 12123 Sqm

Neighborhood: Jebel Ali Free Zone, UAE

Construction Cost: \$449.5/Sqm

Completed: Dec 2014

Date of Certification: Nov 2016

BENEFITS

28.90% Savings on Energy Use

52% Savings on Potable Water Use

15.20% Materials Use with Recycled Content

30.59% Regional Materials Use

3.02% of total energy cost from Solar PV

50% 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 “CNBM_JAFZA” has been awarded with Prestigious Green Building Certification established by the EHS Tarkhees.

China National Building Materials Group Corporation (CNBM) was established in 1984 with approval from the China National Council, Upholding the philosophy of “Making Best Use of Resources to Serve Construction”, and vigorously carrying out such strategies as “technical innovation”, “internationalization of building materials”, and “building strength with talents”. The Organization is a winner of several international awards for quality, environmental sustainability and service standards.

CNBM_JAFZA is a new construction Facility project which was decided to target EHS Green Building certification during the design stage. The proposed project is a G+1 Office and Warehouse Building for Chinese National Building Material Group on plot no S30408 at JAFZA, Dubai, U.A.E. The plot area for the development of project building is 52,188 Sqm and the gross floor area is approximately 12,123 Sqm. There are two floors above grade with Parking Externally. The building uses energy from electricity and uses water from a municipal potable water system.

Susnomics Engineering Systems FZ-LLC

705 DSC Towers | Dubai Studio City | P.O.Box 478820 | Dubai | UAE

Tel : +971 4 4212737 | Fax : +971 4 4212752 | Mob : +971 557290836

CHINA NATIONAL BUILDING MATERIAL-JAFZA PROJECT PROFILE

SUSTAINABLE SITES AND TRANSPORTATION

- ❖ Provides access to public transportation
- ❖ Provides Bicycle Storage and Changing Rooms
- ❖ Provides preferred parking and low-emitting and fuel-efficient vehicles on-site
- ❖ Provides car/van pool parking
- ❖ 100% of the building on-site parking is located under cover
- ❖ Roofing materials meet the SRI requirement avoiding heat island effect

ENERGY, WATER AND MATERIAL RECOURSE CONSERVATION

Susnomics Engineering Systems FZC as a Sustainability Consultant for CNBM_JAFZA, 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 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 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 volatile organic compounds (VOC) for adhesives, sealants, paints and coatings and had installed carpet which is CRI certified

THE TEAM

Owner: China National Building Materials (CNBM)

Design Consultant: Corporate Planners Engineering Consultants

Contractor: China Construction

Green Building Consultant: Susnomics Engineering Systems FZC Dubai, UAE

LEED AP: Shyam Chandra V

Commissioning Authority: Susnomics Engineering Systems FZC Dubai, UAE