

# **EMIRATES EXTRUSION FACTORY LLC** OFFICE & FACTORY BLDG. TECHNO PARK, DUBAI



### **FAST FACTS**

Project: Emirates Extrusion Factory LLC – G+1 Office & Factory Plot No TP030205, Techno Park Dubai, UAE LEED Certification Level: Silver, LEED NCv2.2 for Multiple Bldgs Gross Floor Area: 33, 377 sq.ft. Office Bldg. & 79, 170 sq.ft. Factory Neighborhood: Technopark, Dubai UAE Completed: March 2014 Date of Certification: 21 January 2015

#### **BENEFITS**

- 18.80 % Overall Savings on Energy Use
- 100 % Potable Water Reduction for Irrigation Purposes
- 31.10 % Reduction on Potable Water Used on Flush & Flow Water Fixtures
- 33.59 % Materials Used with Recycled Content
- 42.70 % Regional Materials Use
- 81.48 % On-site generated Construction Waste diverted 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 "Emirates Extrusion Factory LLC" has been awarded with Prestigious LEED SILVER Certification established by the U.S. Green Building Council(USGBC)

**Emirates Extrusion Factory LLC** – is a newly constructed Facility Complex project comprises G+1 Office Building having 33, 377 sq.ft gross floor area and 79, 170 sq.ft. Factory. These 2 building blocks are designed in such a way that the Factory would function solely for production and the G+1 Building functions as Office and the Factory Staff's facility to expand Emirates Extrusion's Ajman Facility. In conformity with Sustainable Vision of Dubai through a wiser use of natural resources, Emirates Extrusion LLC is contemplating a city wide sustainability program.

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LEED POINT SUMMARY					
34 out of 69					
34	34 Points Achieved 69 Points Available				
Sustainable Sites		10	14		
Water Efficiency		5	5		
Energy & Atmosphere		6	17		
Materials & Resources		6	13		
Indoor Environmental		3	15		
Innovation & Design		4	5		





### **PROJECT PROFILE**

## EMIRATES EXTRUSION LLC, Plot No TP030205 Tech Park, Dubai, UAE

#### SUSTAINABLE SITES & WATER EFFICIENCY

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

- The Project was developed around sub-urban area with existing infrastructure.
  - Provides preferred parking for carpool and low-emitting and fuel-efficient vehicles on-site
  - Promotes no-fuel transportation means by providing Bicycle Rack & Changing Facility
  - High SRI value for Roofing material
  - 100% of paved surface are installed with high albedo material
  - Utilized Low-Water Consuming Species and used onsite STP treated water for irrigation
  - Installed efficient water fixtures which consumes lesser water compared to a conventional one
- Installed Sewage Treatment Plant for Irrigation & other use and Effluent Treatment Plant for the Factory's water needs

#### **ENERGY EFFICIENCY**

Project is designed as per ASHRAE Std. 90.1-2004 and following are the Energy Efficiency Measures incorporated in the project:

- Highly insulated mass Wall and Roof
- Optimized Glazing
- Efficient lighting fixtures and incorporating timer control for the internal and external lighting
- Efficient HVAC systems Better EER Split-Ducted units and ERVs
- Client's drive in implementing Enhanced Commissioning as well as M&V process during its operation

#### MATERIAL AND RESOURCES

- 81.48% (by weight) of the construction waste diverted from landfill.
- 29.87% of construction material used accounts to pre-consumer & post-consumer recycled content.
- 42.7% of construction material are regionally available materials –materials which are extracted/harvested & manufactured within 500miles radius from the Emirates Extrusion Techno Park Site
- Provides appropriately sized areas & bins dedicated for the waste segregation/collection during the bldg. operation

#### INDOOR ENVIRONMENTAL QUALITY

- The IAQ performance complies with the minimum requirements set by ASHRAE Std. 62.1-2004,
- Developed and implemented a Construction Indoor Air Quality (IAQ) Management Plan in reference to SMACNA guidelines
- Utilized Interior finishes ie., adhesives, sealants, paints and coatings which has low emission & or VOC compliant
- Non-smoking policy is developed & to be implemented in the Building Facility

#### **OTHER GREEN FEATURES INCLUDES**

 Earned an exemplary performance in vegetated open space, on-site Sewage Treatment Plant and installation of high albedo paving material.

#### THE TEAM

Owner: Emirates Extrusion Factory LLC

Owner Representative: Mr. Said El Hilali (Plant Manager) Design Consultant: Al Jassim Engineering Consultants Contractor: SAM Building Contracting LLC & Al Zaim Services LLC Green Building Consultant: Middle East Centre for Sustainable Development (MECSD), Dubai, UAE Commissioning Authority: Pacific Control Systems LEED APs: Ms. Charity N. Pena & Mr. Nowfal K.M.