



# SAPIN CAN FACTORY, UAE LLC



	37	69
<b>Sustainable Sites</b>	10	14
<b>Water Efficiency</b>	3	5
<b>Energy &amp; Atmosphere</b>	6	17
<b>Materials &amp; Resources</b>	4	13
<b>Indoor Environmental</b>	9	15
<b>Innovation &amp; Design</b>	5	5
	<input type="checkbox"/> Points Achieved	<input type="checkbox"/> Points Available
<b>LEED POINT ACHIEVEMENT</b>		

## FAST FACTS

**LEED Certification:** Silver, New Construction (NC) V2.2  
**Square Feet:** 33,691 sqft / Factory & Office Building  
**Neighborhood:** Jebel Ali Free Zone, Dubai, UAE  
**Construction Cost:** \$ 136 / square foot  
**Completed:** 2009  
**Date of Certification:** May 15, 2010

## BENEFITS

- 21% Less Energy Use
- 40% Reduction in Water Use Inside the Building
- 54% Less Potable Water Used for Irrigation

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

Implementing this resolution, Dubai becomes the first city in the Middle East to adopt green building specifications and requirements. The resolution falls in line with Sheikh Mohammed's keen interest in dealing with the current environmental challenges.

We are proud to inform that "SAPIN CAN FACTORY" 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). It is the first factory project in the UAE to achieve the LEED NC 2.2 Silver Certification.





## PROJECT PROFILE

### SAPIN CAN FACTORY, UAE LLC, JAFZA, Dubai, UAE

#### THE NEW BUILDING

**Sapin United Arab Emirates LLC** – the first factory in the Middle East to implement green strategies and achieve LEED Silver certification. The factory and office with build-up area of about 33,691 square feet is setting in a plot site area of about 159,090 square feet. The factory is strategically constructed adjacent to Nestle Middle East manufacturing facility, as SAPIN is supplying milk-powder cans to Nestle 24 hours a day and 6 days a week. It is a can making factory that manufactures aerosols, cans and dry-powder milk cans.

#### INDOOR ENVIRONMENTAL QUALITY

To enhance the indoor environmental quality of the facility, Sapin United Arab Emirates LLC has complied with minimum requirement of ASHRAE 62.1-2004, Ventilation for Acceptable Indoor Air Quality and ASHRAE 55-2004 Thermal Environmental Conditions for Human Occupancy for the comfort of the occupants. The building is designed with active mechanical system and passive natural ventilation, thus making it a mixed mode system. Sapin Can will conduct an occupant thermal comfort survey every six months to ensure that employees are comfortable in their work environment.

#### LOW-EMITTING MATERIALS

To provide comfort and healthy indoor environment, Sapin United Arab Emirates LLC uses low-volatile organic compound (VOC) for all their adhesives and sealants for all projects. The project office tiles were laid on black sand and that it has zero VOC. The project tracked the VOC content of all adhesives and sealants that complied with VOC limit and in accordance with reference standards.

#### GREEN EDUCATION

To take advantage of the educational value of the green building features of the project, Sapin Can Factory develop an actively instructional educational campaign. The campaign will include the development of a case study to share with the USGBC to inform the design of other buildings based on the success of the project. It will also include an educational outreach program to focus on sustainable practices, using the project as an example .

#### OTHERS GREEN FEATURES INCLUDE

The SAPIN management has long realized the harm that carbon emitted from vehicles to our environment that is why this factory facility was build-up next to Nestle where they supply milk cans. Through this direct connection, SAPIN is saving approximately 3,600 truck trips at 1,000 km each per annum or about 63,500 liters of fuel per annum.

SAPIN provided shuttle bus for employees and guests and encourage car sharing among their employees. The project also installed water efficient fixtures and native plants for landscaping that consumes less water, that it has exceeded the projected water savings of 40% and therefore eligible for an exemplary performance.

#### LESSONS LEARNED

The following should be considered in pursuing a LEED certified green building project:

- Understand the credits, templates and application process upfront
- Assist individual team members in completing their assigned credits
- Be sure to gain expert assistance in energy analysis

#### THE TEAM

**Owner:** Sapin United Arab Emirates LLC

**Design Consultant:** PAX-KENT International LLC

**Contractor:** MAS Consult Engineering Consultants

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

**LEED AP:** Ashraf Khan & Melanie Bacho

**Commissioning Authority:** Pacific Control Systems

**Photograph Courtesy of:** MECSD & Sapin