



Eaton's LED Lighting and Controls Solutions Help THREE Consultoría Medioambiental's New Corporate Office Obtain Platinum v4 LEED Certification

Location:

Monterrey, Mexico

Segment:

Commercial Construction/Lighting

Challenge:

Build a new corporate office with the sole requirement and goal to obtain Platinum v4 LEED Certification

Solution:

Corelite Divide LED Luminaires, Halo SLD Surface LED Downlights, Halo L807 LED Track Lighting, Metalux BAU LED Wall Luminaire, Sure-Lites AEL Emergency Lighting, Lumark Crosstour LED Wall Packs, Greengate Lighting Control System

Results:

The building is the first in Latin America and the second one worldwide to obtain Platinum BD+C v4 certification for New Construction.

Architect:

THREE Consultoría Medioambiental

Lighting designer:

Aether Ingeniería

Electrical engineer:

THREE Consultoría Mediambiental

Photography:

THREE Consultoría Medioambiental

"Our employees are proud of what we have accomplished and we commonly have questions from visitors as they can't understand the high lighting levels with so few luminaires; we always explain that's the gain of high technology combined with aesthetics from the Divide luminaires," said Salinas.

Background

THREE Consultoría Medioambiental, located in Monterrey, Mexico, is an environmental consultant company in green construction with a mission to transform the Mexican construction industry through the design, construction and rehabilitation of ecological, economic and socially sustainable buildings, focusing on positive change in the environment and in profitable strategies.

Challenge

Building a new corporate office and wanting to lead by example, the company's 2,680 sq. ft. corporate office's sole requirement and goal was to obtain Platinum v4 LEED Certification.

The company's lighting goals included having proper light levels and uniformity according to IESNA for all the spaces,

while meeting without exceeding LEED power density limits. The energy-efficient solutions also needed to be glare-free, as well as incorporate a controls solution. In addition, to avoid light trespass, no uplighting was required in any exterior locations.

Looking for a manufacturer with a National Institute of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP) accredited test labs, THREE wanted to be sure that the published technical and photometric information was verifiable from the chosen manufacturer. The NVLAP provides third-party accreditation to testing and calibration laboratories in response to legislative action or requests from government agencies or private-sector organizations.



Powering Business Worldwide

Solution

Every step was taken to minimize waste and to reuse materials when possible. The unique construction of the new corporate offices consists of shipping containers that had reached the end of their useful life and the building's location was placed based on reducing transportation needs. In addition, the building orientation was set considering wind currents to better ventilate spaces. The building is equipped with a rain water collection system and A/C condensates are directed to WC water tanks. THREE also uses green waste to generate compost and the building produces all the energy it consumes – and more – through solar panels.

Working with lighting designer and distributor Aether Ingeniería, which provided the design and technical expertise, Eaton's energy-efficient LED lighting and controls solutions were chosen due to the product's high quality, aesthetics, timely delivery and performance.

Solutions for the office area and board room include the

Corelite Divide LED suspended luminaire featuring Eaton's WaveStream™ LED technology that incorporates high-performing AccuAim™ optics, allowing for maximum energy savings while achieving the desired light levels and glare-free illumination. Eaton's Greengate daylighting controls automatically controls light output illumination in monitored areas to maintain a constant light level regardless of the amount of natural light present. Additionally, interior LED solutions include Halo surface-mounted downlights, track fixtures and Sure-Lites emergency lighting. For exterior lighting, patented Lumark Crosstour wall pack products illuminate the exterior perimeter and parking lot area.

"Aesthetics played an important part in the selection process," said Lourdes Salinas, director, THREE Consultoría Medioambiental. "The Corelite Divide luminaire is very nice and the modern look is matched with the efficacy and the photometrics that allowed us to meet LEED criteria."

Results

As the construction was done under LEED guidelines for new construction, the building is the first in Latin America and the second one worldwide to obtain Platinum BD+C v4 Certification for New Construction.

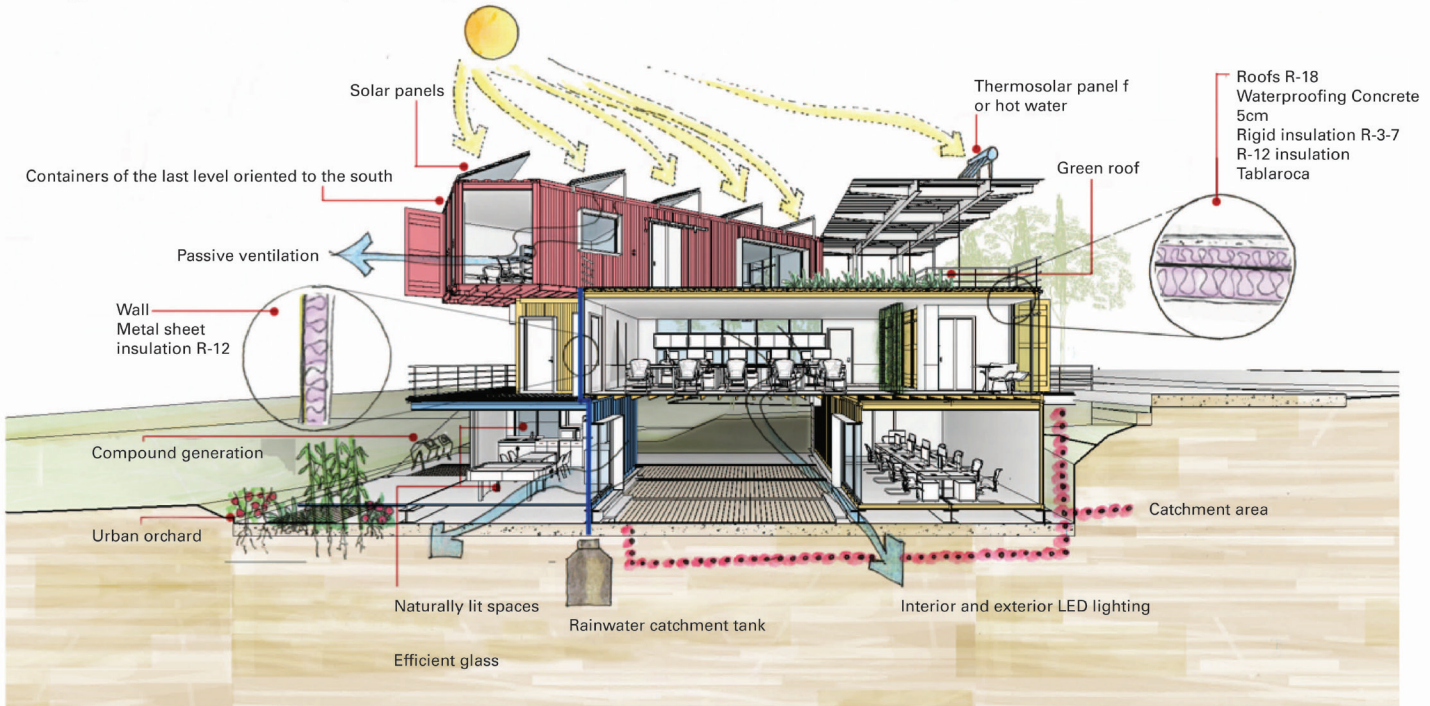
Receiving accolades for their sustainable results, the mayor sent a representative to the company's inauguration day and its many visitors have been very kind to recognize their efforts. The company has placed information plaques throughout the office to inform visitors about the positive environmental impact of each sustainability strategy in the building.

About Eaton

Eaton is a power management company with 2016 sales of \$19.7 billion. We provide energy-efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton is dedicated to improving the quality of life and the environment through the use of power management

technologies and services. Eaton has approximately 95,000 employees and sells products to customers in more than 175 countries. For more information, visit **Eaton.com**.

Diagram of sustainability strategies



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