Project Overview

Renowned Design Team Creates Cutting-Edge Lighting Environment in New Sekura Offices in Mexico City

A Closer Look at the High-Performance, Wellbeing-Enhancing Lighting System Delivered On-Time and Under Budget

"On this project, we wanted to design a high-performance space that offered everyone access to natural light and provided a good balance of artificial light. The main challenge was finding a system that would do everything we wanted it to do within our budget."

— Kai Diederichsen, Founding Partner/Design Director at Luz en Arquitectura.

Introduction

Lighting environments can improve the wellbeing, productivity, and satisfaction of people in a space. This concept is well-known to the thought-leading architects and designers Juan Carlos Baumgartner of the renowned architectural firm SPACE and Kai Diederichsen of Luz en Arquitectura, who teamed up on this project to create a high-performance interior that people would feel good working in.

"One of the things I love about this design is that it creates areas that feel different within the larger office space. We crafted these unique environments using different intensities and qualities of light and distinct materials," explains Diederichsen.

The new office space for the financial services firm Sekura occupies two commercial floors on top of a new shopping center in Mexico City. The glass façade bathed the interior in daylight and the design team demanded a lighting system that could balance the presence of natural light and artificial light in the space. In addition, the system needed to be installed and functional quickly, allowing the team to remain on-schedule and within the limits of a tight budget.

The project demanded a high-performance lighting control solution that would perform as advertised, so the designers chose Lutron.

☀ LUTRON

The Challenge

Neuroarchitecture—the study of design aspects that impact and improve the emotional and physical health of people when they are inside the built environment—was a key consideration for the design team. As award-winning architect Juan Carlos Baumgartner explains, "My firm has been focused for many years on the concept of neuroarchitecture and we wanted to apply some of the latest scientific findings to this design. The idea of this project was to create a high-performance office space that would also improve the wellbeing of Sekura employees. This is the challenge of all projects."

Daylight is an important ingredient in high-performance, healthy interiors. Access to natural light during the day provides occupants with a long list of benefits including improved sleep, better concentration and mood, and lower risk of several devastating diseases. At Sekura, the glass facades made ample natural light available and the open interior was designed to invite the daylight deeper into the floorplan. Coordinating the overhead light levels with the available natural light provided a balanced and comfortable visual environment that also saved energy.

This level of performance required a cutting-edge lighting and lighting control system. "I needed luminaires that could modify the amount of light they produce. I needed sensors that could detect the amount of light in the space and sensors that could detect if the space was occupied or empty. Then I needed this combination of sensors to control the luminaires. Lutron is very good at this integration," says Baumgartner.

The Solution

"For the lighting control on this project, we chose a Lutron product called Vive," says Kai Diederichsen, the project's lighting designer. "I love working with Lutron because they always guarantee that the system will work."

Vive is a wireless lighting control solution comprised of daylight sensors, occupancy sensors, and wall controls. The system can control a wide variety of lighting fixtures—from standard 2x4 troffers to the special linear and other high-end fixtures located throughout the Sekura offices. Lights controlled by Vive can be programmed to change based on the time of the day, automatically respond to environmental triggers like the presence of daylight or occupancy, or be manually modified at local keypads or through the Vive app, which can be downloaded onto a smart device.

The flexibility of the lighting system was important in achieving the overall design objectives of the space. "The conditions on each façade are distinct and dynamic—sometimes its sunny, sometimes its cloudy—and the artificial light system must adapt to those changes. Sometimes we don't need artificial light at all and the entire space is illuminated with natural light," explains Diederichsen.

The team was under tremendous time and budgetary constraints, which meant that they needed a lighting solution that would work correctly, without issues. "When working on a project that has pressures related to cost and timing, you can't be silly trying solutions with different components that may or may not work together. We liked that Lutron was the one-stop shop," says Baumgartner.

According to Diederichsen, Lutron has earned a reputation for reliability and quality. "Lutron products are proven, and I let my clients know this. I want my client to have the peace of mind to know that they are buying and installing a product that will work. The controls will dim correctly and turn the lights on and off as programmed. It's really important," he says.

The wireless nature of the Vive solution also provided many time- and cost-saving benefits to the project. Installation was faster and more straightforward than wired lighting systems that require all the components to be hardwired to one another.

With Vive, the Sekura office interiors turn-on automatically in the morning, dim and turn-off throughout the day when there is sufficient daylight in the space or when a room is empty keeping the interior space comfortable and saving lighting energy, whenever possible.

"One of the things I love about this design is that it creates areas that feel different within the larger office space. We crafted these unique environments using different intensities and qualities of light and distinct materials,"

— Kai Diederichsen

Results

In the end, the project exceeded client expectations in terms of the beauty, comfort, and functionality of the space and it was delivered on time and under budget. Gonzalo Mancera Corcuera, General Director and CEO at Sekura says, "Working with Lutron has been very positive. The project was completed on time and under the original budget we had discussed. The lighting system does everything we wanted it to do and living with it day-to-day has been great. It has exceeded our expectations."

From Baumgarten's perspective, client satisfaction is a key metric of success and so he makes sure that he knows how his clients feel about their project. "The clients are very satisfied with the result," he says. "They have an office where the lighting levels change automatically based on available natural light and occupancy and the system is very easy to use."

"At the end of the day," Baumgarten continues, "when we make specifications, with each specification we are putting a little of our reputation and our client's trust on the line. That's why we must be very careful with the brands and products we specify. For this project, we chose Lutron."

Client
Sekura Offices, Mexico City

Provider
Lutron Electronics

Solution
Vive Wireless

Lighting Designer
Kai Diederichsen

Architect
Juan Carlos Baumgarten

Photos
Courtesy Space Mexico

Visit **lutron/vive**

LUTRON