

SILVAIR

**Retrofitting
McWong warehouse
in Sacramento, CA**

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A recent retrofit of McWong's 25,000-square-foot facility in Sacramento is the biggest warehouse implementation of a SIG-qualified Bluetooth mesh lighting network to date. Involving multiple luminaires from different manufacturers, the project highlights the interoperability of Bluetooth mesh and the benefits that the technology can deliver in industrial spaces.

McWong has collaborated in offering qualified Bluetooth mesh solutions by putting the Silvair Firmware into a wide array of products, including fixture controllers, sensors and switches. The warehouse project in Sacramento is the first stage of the company's plan to deploy Bluetooth mesh networks at its production and office facilities.



MCWONG

For 30+ years, McWong has produced superior lighting controls and related electrical power and protection components. Today, McWong is an innovator in Bluetooth mesh control solutions with the largest range of qualified Bluetooth mesh devices in the marketplace. With advanced design and manufacturing facilities, McWong offers extensive component choices for OEMs as well as robust solutions for contractors, ESCOs and facility managers.

www.mcwonginc.com

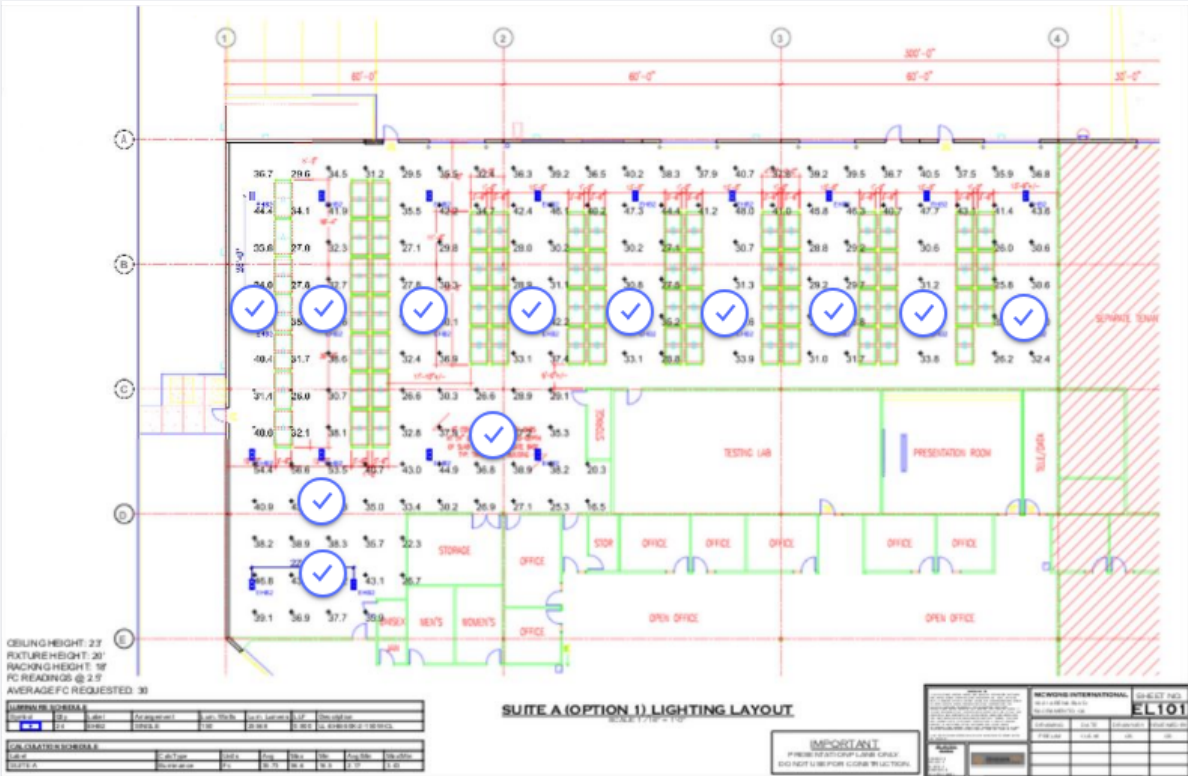
McWong facility

in Sacramento, CA

McWong warehouse | Sacramento | CA

McWong’s 25,000-square-foot headquarters in Sacramento includes a warehouse with assembly area, as well as offices, conference rooms, training spaces and employee lunch/social activity spaces. In the first phase of the retrofit, a wireless lighting control system powered by Bluetooth mesh was installed across the warehouse production space. Smart fixtures were installed above aisleways and assembly areas. The retrofit itself didn’t cause major disruptions, allowing the facility to operate normally despite the ongoing implementation.

The project plan included integrating Bluetooth-enabled occupancy sensors per new lighting fixture throughout the warehouse area, as well as wall switches at the exits. A total of 12 lighting zones were created, as shown in the floor plan below.



As part of the project, a total of **22 luminaires** from different manufacturers were installed across the warehouse. The following luminaires were used:

- 2x LumEfficient**
- 6x Filamento**
- 6x Linmore LED**
- 8x Flex Lighting Solutions**

Each fixture was integrated with a **smart occupancy & light sensor** from McWong (PSC-BL-I-FM-DC0-BLE). A total of 22 such devices were used to enable deployment of autonomous occupancy sensing strategies at the warehouse. In addition, **three wireless McWong switches** (PSC-DM-WS-100-BLE) were installed to allow the employees to control the installation manually whenever needed.



◀ Members of the project team use the mobile commissioning app (L-R: Andrew Judy, McWong; Ilkan Cokgor, Pacific Tech USA; Stephen Zhou, McWong).

McWong sensors are qualified Bluetooth mesh products with the Silvair Firmware inside. In addition to occupancy and ambient light sensing capabilities, each such sensor includes a **software controller** that turns a standard luminaire into a smart node of a Bluetooth mesh lighting network. This eliminates the need for a central control box, driving down the cost of the entire installation, reducing unnecessary complexity, and improving the reliability and scalability of wireless lighting control systems.



◀ The project team participated in the installation and commissioning of the fixtures and controls over a 2-day period in December 2018.

The system was configured using **Silvair Commissioning**, a dedicated set of tools for setting up and managing Bluetooth mesh lighting networks. Silvair Commissioning includes a cloud-based web app, which allows for performing initial commissioning activities before visiting the site, and a mobile app that can be used to finalize the process on site. This is a recommended path that gives access to a wider range of configuration options, but other approaches are also possible, reflecting the flexibility of the Silvair commissioning process.

McWong's warehouse was primarily commissioned using the **mobile app**. As part of the process, luminaires were grouped into 12 zones, desired lighting control scenarios were specified, and occupancy sensing were adjusted to meet specific lighting needs of McWong's employees.

With the first phase of the retrofit, McWong deployed a robust wireless control system that enables highly efficient control strategies. Future plans involve deployment of a gateway that gathers detailed occupancy and power consumption data from individual luminaires, enabling advanced monitoring and maintenance features developed by Silvair.



◀ The Silvair mobile app offered convenient and fast commissioning capabilities.

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