APPLICATION CASE STUDY

LIGHTING CHALLENGE 145

TekDek[™] LED with TekLink[™] TL50 Controls Ideal Solution for Aging, Inefficient Lighting at General Mitchell Airport



"We look forward to easier maintenance, more energy savings, uniformity and serviceability, and a modern looking facility, which is important, because it may be the first impression of our city that a visitor receives."

- Daniel S. Piper, Project Manager, Leedy & Petzold Associates

Location: Milwaukee, Wisconsin Project Engineers: Leedy & Petzold Associates Agent: Elan Lighting, Milwaukee, Wisconsin





Transportation

Challenge: Replace four different types of aging luminaires/lamp sources with a single, controllable solution that meets the IES light level recommendations and also achieves Wisconsin state targets for allowable wattage per square foot.

Solution: TekDek TD17 with TekLink TL50 controls

Benefit: One-to-one replacement of more than 4,000 incumbent technology fixtures that ranged from 70-250 watts with 49W TekDek LED fixtures containing occupancy sensors and daylight control.



A brand of La legrand

Creating a Positive First Impression of Safety and Security with Lighting and Controls

General Mitchell International Airport, Milwaukee, WI



First time visitors to Milwaukee, Wisconsin will find a bustling metropolis with a lovely lakeshore and world-class restaurants and amenities. But before they get to enjoy all the city has to offer, chances are, they will arrive via General Mitchell International Airport (GMIA). In order to reduce maintenance and energy costs, and create a positive first impression on visitors, GMIA is in the midst of converting all airport terminal lighting to LED, including its adjacent 9,000-space, 6-story parking garage.

Prior to relamping, the airport garage contained four different types of incumbent lighting consisting of 150w and 250w HID metal halide units, and 70 and 150 watt high-pressure sodium (HPS) units. Some lights had been removed during a previous renovation, leaving the garage black in some areas: the HPS lights glowed a dim orange in others. In order to properly illuminate the space, GMIA chose to install 4,000 new LED luminaires.

Working closely with Elan Lighting and Leedy & Petzold Consulting Engineers, the airport selected Kenall's 49L LED TD17 luminaires, controlled by integrated TekLink[™] TekDek[™] TL50 controls. Daniel Piper, the project manager from Leedy & Petzold, states that engineers faced significant location challenges, including issues with spacing, mounting, direction of car and pedestrian traffic, and lumens per watt requirements. Kenall products provided "all the options needed for the application, "according to Piper. Users and specifiers also valued working with a local manufacturer: Kenall's design personnel visited the job site to provide customized solutions and support as needed.

The TekDek TD17 luminaires at GMIA have a ceiling-mount design with some direct conduit entry, and TekLink TL50 controls provide occupancy-sensing and daylight harvesting on a per-unit basis. Each unit is controlled remotely, eliminating the need for maintenance personnel to climb a ladder in order to change the settings. When no traffic is nearby, the luminaires dim to 10%, but as soon as occupancy is detected, the lights turn up to full power. The microwave occupancy sensors do not require line-ofsight or a heat signature to trigger, making them an ideal choice for the brisk Milwaukee winters. This, along with the more efficient LEDs, will provide GMIA with significant energy savings. In the absence of a utility rebate, Piper says, "focus on energy has provided a rebate".

TekDek TD17 with TekLink TL50 Features:

- Outstanding uniformity for heightened safety and security of garage patrons
- Microwave occupancy sensing and daylight sharvesting
- Reduced maintenance costs due to long life LEDs (150,000 hours)
- Ingress Protection (IP65) rated and Wet Location listed; ideal for challenging parking environments
- Vandal-resistant design; ideal for use in public spaces
- Kenall's exclusive Peace of Mind Guarantee[®] (when specified with polycarbonate lens)



This photo demonstrates the contrast between the incumbent high-pressure sodium lighting (top deck above) and the new LED TD17 luminaires (below).

Benefits for General Mitchell International Airport:

- Modern design aesthetic provides clean, attractive first impression for airport visitors
- Kenall's patented optics reduce disabling glare, increasing patron safety
- Microwave sensors eliminate line-of-sight issues experienced by passive infrared (PIR)
- Cost and energy savings via reduced electricity usage
- Fewer maintenance hours

For more information, please visit us on the web at www.kenall.com



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details.