



Albion Correctional Facility Reduced Energy Cost by 50 Percents with LED Lights from Starco Lighting

Starco helped 14 New York State Department of Correctional Facilities improve security and save energy in 2016

DETAILS

Project:

Albion Correctional Facility
Albion, NY

Lighting Manufacturer:

Starco Lighting

Products:

Starco TLED T8 Premium Series Lamp

About Albion Correctional Facility

The New York State Department of Corrections and Community Supervision, guided by the Departmental Mission, is responsible for the confinement and habilitation of approximately 53,000 individuals under custody held at 54 state facilities and 36,000 parolees supervised throughout seven regional offices.

Albion Correctional Facility is the largest female prison in Western New York Region. The facility is medium security level and has over 10,000 old fluorescent lamps required to convert to LED. Over the years, the fluorescent lamps turned to degrade and yellow, resulting in insufficient light output. The fluorescent lamps had to be replaced approximately every 20,000 hours and retrofit the fluorescent fixtures with LED lamps is the right turn-key solution for interior lighting.



The Challenges

Security is a top priority for any prison. When selecting the LED lamps for correctional facilities, they must be able to significantly save energy and reduce maintenance costs while effectively illuminating all the different buildings, including an administration building, a program building, a food service building, power house, maintenance building, a gymnasium etc. Some lights had to be installed during off hours. The new LED lighting system needed to last for a significantly long period of time and be simple to maintain.



The Starco Lighting Solution

Albion Correctional Facility selected Starco's Shatterproof Premium Series LED T8 lamps to retrofit the existing fluorescent fixtures. Starco installed more than 8,200 LED lamps in the facility. The direct wire solution provided by Starco Lighting eliminated ballast issues entirely. The rewiring was simple and after the direct wire solution was adopted with Starco LED lamps, it is very easy to replace a single lamp in the fixture years later. An electrician will not be needed.

The Results

In the food service building, Starco's LED lamps provide the inmates with a bright eating area. The gymnasium is illuminated by 8ft fixtures with 6 Starco's 4ft LED T8 lamps per fixture. The 32-watt fluorescent lamps in the program and administration buildings requiring 36 input watts in the troffers were replaced with Starco's 18-watt LED lamps, which provided a 50 % energy savings. The LED lamps have an extremely long lifetime (L70 is 184,000 hours), which will significantly reduce maintenance costs.

According to James Robinson, the maintenance supervisor of Albion Correctional Facility, out of 8,200 Starco LED lamps installed, the failure rate is considered as zero.

Starco Future-Proof Solution

Given the persistent advancement of LED technology, there is no plateau in sight. At the end of life, Starco customers can take advantage of the technology curve as they deem financially beneficial. Future benefits include improved interoperability with controls systems, LED functional improvement, increased efficacy and possibly the adoption of organic LED and laser diode technologies in the years ahead.

