

Loveland Church Enhances Worship Experience by Modernizing its Lighting

Situation Before Upgrades

The Good Shepherd Church in Loveland has been in operation for 30 years. Pastor Rob Strouse came in 2009 and decided to modernize a number of areas. One that immediately came to mind was improving the lighting to create a more vibrant worship environment and save energy. There were many old fluorescent fixtures that had never been updated.



The auditorium had 30 main incandescent light fixtures that consumed 15 Kilo Watts (KW). This is like running 12 toasters whenever the lights are on.

Improvements made

The first project was the updating of the lights in the offices, halls and classrooms.

The second and more extensive project was the retrofit of the lighting in the auditorium where services and events are held.



Situation after Upgrades

The hall and office lighting project yielded a “more positive vibe” in the work environment.

The upgrade of the 700 seat auditorium was more challenging. The fixtures had yellowed, and looked dated. In addition, the church budget would not allow replacement of the fixtures. The light output of each fixture was too low for the space. There was a strong desire to retain the dimming capability that is quite easy to do with the original incandescent lighting and more challenging with compact fluorescent technology.

Mike Haddorff of Collins Control & Electric came up with an innovative and cost-effective solution for this project. They made a prototype of the proposed solution so that the appropriate light output could be evaluated. They proposed that the company would disassemble and remanufacture the light fixtures so that they could house modern compact fluorescents with an inner core of LED floodlights. They also made mechanical changes in the lights for a more modern look.



Testing was done with a prototype to ensure that the light output of the whole project would meet the church's needs. All of the lights can be easily dimmed and controlled with a wireless remote.

In addition, Collins Control & Electric helped the church apply for a significant rebate from the electric utility.

Results Achieved

Better lighting had a surprising effect on the *congregation's enjoyment of the services*. The right mood can be set precisely for different parts of the service – lower for worship, and higher during the sermons. Pastor Strouse has noticed more people taking notes during sermons, for example, and more appeal to all generations from students to seniors.

The project cost was about **25% below other alternatives**, because Collins Control & Electric creatively addressed the remanufacturing of the existing lights.

The power used by the new lights in the sanctuary is **79% less** than the consumption of the original incandescent lights. Early data shows that the upgrades that resulted in saving **11-15% of the overall electricity bill**. These savings can be better used for ministry purposes. The church even received an Energy Star rating from the utility to reward its stewardship of the environment.

Lower maintenance costs are an additional benefit. The auditorium ceiling is very high, requiring rental of a hydraulic lift every time they want to change lights. Lamps now have to be changed 16 times less often since the new lights have a 10,000 hour life vs. the original 600 hours.

Collins Control & Electric achieved these results because they are willing to go beyond the obvious, and creatively address customers' requirements. They not only provide traditional electrical contractor services, but go beyond to deliver complete and innovative solutions.

As Pastor Strouse stated: "As far as satisfaction with the customers service, we're 100% satisfied. I would highly recommend them. They are very easy to work with, they are good communicators, between us, their partners, and their crew."

Collins Control & Electric provides complete electrical contractor services to commercial and residential customers in Northern Colorado. We specialize in electrical renovations, upgrades and energy efficiency improvements for residential, commercial and industrial customers. We provide traditional electrical services, energy efficiency solutions, solar power, and generator services.

