Intermatic's ET90000 Solves Exterior Lighting Challenges for Denver Public Schools

Jim Faes, Director of Sustainability for the Denver Public School system, shares with the district a commitment to creating a more sustainable and cost-effective learning environment for Denver's students. Faes put this commitment into practice recently when problems with the schools' exterior lighting controls surfaced.

Complaints were coming in that the exterior lights were on too long during the day, either shutting off too late in the morning or turning on too early in the evening. The district maintenance staff was fielding more than 200 calls per month regarding exterior lighting control challenges.

Faes discovered that the photo sensors that controlled many of the schools' exterior lights were failing. But they failed, by design, with the lights on, which accounted for lights staying on later in the morning and coming on earlier in the evening.

> LIGHTING WAS ALSO IMPACTED BY THE FACT THAT THE MECHANICAL TIME CLOCKS THE SCHOOLS WERE USING, WHILE RELIABLE, COULD BE DISRUPTED BY POWER OUTAGES. WHEN THAT HAPPENED, MAINTENANCE HAD TO RE-SET EACH AND EVERY CLOCK IN THE AREA OF THE POWER OUTAGE.

Faes was determined to fix these problems, stating, "It's important to be good stewards of public tax payer dollars."

Faes initiated a product review that quickly led him to Intermatic's ET90000 line. Intermatic's ET90000 devices enable independent programming for each day of the year as well as holiday and special events programming. This gave the ET90000 product line a "fix it and forget it" advantage that would ease the district's maintenance burden and contribute to energy savings.

> "WE DON'T HAVE TO THINK ABOUT THESE CLOCKS," FAES SAYS. "AS THE DAYS GET LONGER OR SHORTER, IT FINE TUNES ITSELF BEYOND OUR CAPABILITY ON A DAILY BASIS."

In addition, the controller has a super-capacitor that maintains the scheduling function and information carryover for 100 hours in the event of a power outage. That eliminates maintenance visits to re-program each controller.

From the ET90000 product line, Faes selected the ET90215C 365-day Astronomic Energy Control device for the Denver schools' needs. DPS purchased 60 of the ET90215C units in mid-2014 and, by the end of the year, had installed approximately 40.

One of the early pay-offs has been that maintenance calls for exterior lighting issues have dropped almost to zero, in those schools that have installed the ET90215C device. That's a significant savings in maintenance hours and leaves maintenance free to take on other tasks.

There have also been energy savings. Faes estimates that previously, fixtures were using an extra two hours of energy a day, which adds up to $180 per year.

> WHILE $180 MIGHT SEEM A MODEST AMOUNT, MULTIPLIED BY 185 SCHOOLS, THE POTENTIAL SAVINGS MAY REACH APPROXIMATELY $30,000 ANNUALLY. "IT'S REALLY IMPORTANT TO US TO GET THOSE SAVINGS WHERE WE CAN," FAES SAYS.

Faes believes the ET90215C has made an important contribution to achieving the district's priorities of reducing resource use and increasing savings through efficiency.

"The ET90000 is an affordable, practical, reliable solution to exterior lighting controls," Faes says. "It reduces the number of problems and complaints. Did I mention it's affordable?" he laughs. **"IT'S DEFINITELY WORTH THE EXPENSE."**

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