

# Pleasant Valley Elementary School

Schenectady, NY

## BACKGROUND

Helping institutions such as Pleasant Valley Elementary School purchase and install energy-efficient products and services is a top objective for Blue Sky Lighting Design—a NYSERDA Commercial Lighting Business Partner. Pleasant Valley came to Blue Sky Lighting Design for assistance with a renovation project. The school needed to reduce energy consumption by improving lighting quality and color rendering in a dual-function gymnasium and auditorium.

## CHALLENGES

After careful review of the space, Blue Sky Lighting Design and Pleasant Valley came to two key conclusions: the facility needed to improve color rendering for auditorium events, and the school required a more energy-efficient solution that would be simple to execute and not affect the existing power distribution.

## PROJECT RECOMMENDATIONS

Blue Sky Lighting Design recommended replacing twelve 400-W metal halide pendants with 12 four-light HPT8 HIF high bays. These easily suspended high-bay replacements would help improve color rendering in the auditorium.

In addition, Blue Sky recommended installing high-ballast-factor ballasts so the 12 new fixtures would deliver 36 fc, sufficient for gymnasium functions, without increasing fixture quantity or requiring changes to the existing power distribution system. The HPT8 system also provided instant-on functionality, requiring much shorter warm-up time than the previous metal halide lighting.

**“The NYSERDA Commercial Lighting Program provides me an additional incentive to teach the end user the benefits of proper spacing, glare control, how to minimize wattage per square foot, and the proper usage of controls. The training, knowledge and ability to educate my clients help me be a better designer and stand out among my competition.”**

– Karl Pedersen,  
Blue Sky Lighting Design

## RESULTS & BENEFITS

By using the The Right Light<sup>SM</sup>, a program approach that considers the proper technologies, application and environmental layout, Blue Sky Lighting Design was able to add suspended high-bay lighting to the 2,880 sq. ft. space and reduce energy use by 67.7%.

In all, the project saved:

- \$1,607 in annual savings.
- 3.70 kW compared to the baseline.
- 9,623 kWh compared to the baseline.

Pleasant Valley Elementary School was able to offset some project costs with:

- \$900 in Existing Facilities Program Pre-Qualified (HIF replacement) incentives.
- \$500 in Commercial Lighting Program incentives.



**“Teachers, athletic directors and even students have been very impressed, not only with the increased light level, but the quality of the light. The energy savings was unquestionably a significant benefit to the school system.”**

— R. Nicholas Insognia III, Supervisor of Buildings & Grounds, Schenectady City School District