

Project:

# Douglas County School District

Building Type: Education



Over a period of six years, Colorado's Douglas County School District saved \$16.5 million through energy auditing. One of its most successful strategies was daylighting, which reduced electricity use for lighting and cooling equipment. It also benefitted the district's sustainability efforts. By retrofitting older schools with Solatube® Daylighting Systems, consistent, high-quality natural light was delivered to building interiors without reconfiguring the plenum space or making major structural modifications.

## Objective

With this project, the Douglas County School District sought to enhance the learning environment, promote sustainability, and reduce energy consumption in three of its aging elementary schools

## Products Used

- Northeast Elementary School
  - 77 Solatube SolaMaster® Series 750 DS-C units (21 in. / 530 mm)
  - 9 Solatube Brighten Up® Series 290 DS units (14 in. / 350 mm)
- Sedalia Elementary School
  - 158 Solatube 290 DS units (14 in. / 350 mm)
  - 6 Solatube SolaMaster Series 330 DS-O units (21 in. / 530 mm)
- Acres Green Elementary School
  - 185 Solatube 750 DS-C units (21 in. / 530 mm)

All units installed included Daylight Dimmers.

## Solution

Three of the Douglas County School District's older elementary schools were retrofitted with Solatube Daylighting Systems. Once installed, the delivery of abundant daylight made it possible to turn off the electric lights during operating hours. The science and engineering behind the Solatube Daylighting Systems was even incorporated into lesson plans, creating a "learning laboratory" for students to experience firsthand.

## Testimonial

"The Solatube Daylighting Systems have proven not only to be more effective than artificial light, as far as being brighter and more resilient, but it also gives the sense of being connected to the outside. Morale and performance have historically improved with that. In fact, they not only improve the learning environment and morale of the students and staff, they also save significant funds as far as our utility budget, and that money goes back into the classroom."

**Richard Cosgrove**

Director of Planning and Construction  
Douglas County School District

