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## FOR IMMEDIATE RELEASE:

## GTC CONTINUES TO HELP LOCAL SCHOOLS "GO GREEN" A new, innovative natural lighting unit will save electricity and increase student performance.

Golden Triangle Construction recently installed a natural lighting unit at Southern Hills Middle School in Boulder that will offer significant energy and educational benefits. The device, called a Sundolier <sup>TM</sup>, was celebrated with a ribbon-cutting ceremony this past weekend that included a speech from U.S. House Representative Jared Polis.

The Sundolier device, designed and manufactured by Sunflower Corporation in Boulder, is a satellite-like apparatus installed on the roof of the building to capture and concentrate sunlight. Angled mirrors redistribute the sunlight through the room below, displacing the need for standard artificial light. The mounted fixture inside the building resembles a skylight mixed with a chandelier, and to the casual observer, might look like a traditional ceiling fixture. Sunlight is distributed by washing ceilings and walls with daylight, which creates a natural lighting experience without the problems that windows and skylights have with hot spots and glare.

A Sundolier unit is capable of lighting up to 2,000 square feet on clear-sky day, although back-up lights are still needed for nighttime or cloudy days. Peter Novak, Sunflower's CEO, says, "In Colorado, 200, maybe 250 days a year, we could turn the lights off and reduce air conditioning." Southern Hills is one of six prototype sites to receive a Sundolier from Sunflower, and the company will use the data and feedback from these sites for product research and development. Jim Walsh, President and Founder of Sunflower, said, "We are happy to provide a prototype unit to Southern Hills to demonstrate the benefits of natural daylighting in classrooms, and this partnership with the school district will allow us to test real-life operation and maintenance of the Sundolier unit so we can continue improving it." Other sites include schools in the Cherry Creek and St. Vrain School Districts, as well as the Phillip S. Miller library in Castle Rock.

For Southern Hills, the best thing about the Sundolier unit is that it doesn't just save electricity, it also serves an educational purpose. Several studies have shown that natural daylighting in schools increase student performance. One study<sup>[2]</sup> completed for the California Energy Commission found that among twelve models considered, there was, on average, a 21% improvement in student learning rates from those in classrooms with the least amount of daylight compared to those with the most. "Research has proven that students excel in classrooms with more natural light," said Congressman Polis at the

ribbon-cutting ceremony. "Daylighting applications like the Sundolier will help us add to that body of knowledge, and help further solidify the positive impact on learning that we believe is linked directly to daylight."

GTC, a proud member of the U.S. Green Building Council, staffs a team of LEED<sup>®</sup> Accredited Professionals who help Southern Hills and other schools find cost-effective ways to utilize "green" features like natural daylighting and recycled materials in their projects, or can guide a project through the highest of level of LEED certification. The Southern Hills Middle School project is expected to be complete in August, in time for the new 2009-2010 school year.

[2] Heschong Mahone Group (2001) Re-Analysis Report, Daylighting in Schools, for the California Energy Commission, published by New Buildings Institute, www.newbuildings.org

GTC has been a general contractor in the Front Range commercial construction market since 1977 and is a proud member of the U.S. Green Building Council. For more information about GTC or about GTC's Green Building Program, please call Dennis Richard at (303) 772-4051 or email <u>drichard@gtc1.net</u>.

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