

# LOCUST GROVE MIDDLE SCHOOL LOCUST GROVE, VIRGINIA

## First LEED® Endeavor for Orange County Public Schools



*Size: 169,320 S.F.*  
*Budget: \$37,500,000*  
*Bid: \$30,407,000*  
*Completion: October 2010*

Orange County's growing student population led to a new two-story facility to accommodate 1,200 students in grades three through eight. Spaces in the school include exploratory, special education, music, and general classrooms; science laboratories; a library; a commons area with stage; athletic gyms; locker rooms; kitchen; administration offices; a central courtyard; and various athletic fields. The School Board was determined to pursue LEED® certification for the project, making Locust Grove Middle School the county's first LEED certified project. The facility earned LEED Gold certification, which exceeded the original goal of LEED Silver. High performance and sustainable design features in the school include:

- encouraging alternative transportation by providing bicycle racks and preferred parking and drop-off areas for low-emitting and fuel-efficient vehicles and carpool vehicles;
- selecting roof colors that reduce the heat island effect and minimize heat gain to the building;
- using low-flow plumbing fixtures to reduce water use by 37 percent, saving over 700,000 gallons of water annually;
- selecting mechanical equipment, high-performance glazing, and energy-efficient lighting to reduce energy use by over 30 percent compared to a minimally code-compliant design;
- diverting 89 percent (644 tons) of the construction waste from landfills;
- supporting the local economy by using regionally manufactured and sourced materials for 59 percent of the total project building materials.
- using wood products, such as doors and gymnasium flooring, constructed of timber obtained from Forest Stewardship Council (FSC)-certified forest;
- providing an increased level of lighting and thermal controllability for building occupants' comfort;
- providing views to the outside for 90 percent of regularly occupied spaces;
- using low-emitting building materials and employing green housekeeping to enhance and protect indoor air quality.

