

ROCKINGHAM COUNTY JUDICIAL CENTER WENTWORTH, NORTH CAROLINA

Enforcing Energy Efficient Stewardship

*Size: 176,457 S.F.
Budget: \$39,059,000
Bid: \$37,757,000
Completion: 2011*



The new Rockingham County Judicial Center provides for the county's courthouse, jail and law enforcement services through a three-story facility. Programmed to accommodate 359 employees and an eventual 300 inmates, the facility is also the first Leadership in Energy and Environmental Design (LEED®) Gold justice center in the eastern United States. Among the center's high performance and green building design strategies are:

- energy-efficient HVAC, lighting, and building envelope technologies projected to reduce energy expenditures by 28 percent, or \$94,000 per year;
- a 33 percent decrease in building water consumption through low-flow and dual-flush plumbing fixtures, saving over a million gallons of water annually;
- rainwater cisterns to provide landscape irrigation and aid in stormwater management, saving an additional 600,000 gallons annually;
- recycling of 79 percent of construction and demolition waste to conserve valuable landfill space;
- use of local and regional building materials that support the state economy and reduce transportation impacts on the environment;
- an Energy Star® compliant, highly-reflective roof membrane to lessen local "heat island" effects and help keep the building cool;
- preferred parking for carpool and low-emitting, fuel efficient vehicles to alleviate automobile traffic and pollution;
- outdoor air delivery monitoring systems to ensure an adequate supply of fresh air to each building zone;
- individual lighting controls that enhance occupant comfort and reduce energy consumption; and
- environmentally-friendly housekeeping and pest management programs.

The energy and water savings of this facility are projected to recapture the county's entire investment in LEED strategies (including those that support indoor air quality and the like) in only 5 years. The building is projected to save over \$5 million dollars over a 40 year period, which should escalate even further as utility rates continue to increase.