

ELEMENTARY SCHOOL NO. 11 CHAPEL HILL, NORTH CAROLINA



Size: 98,968 SF
Budget: \$26.4M
Completion: August 2012

The three-story elementary school will accommodate 585 students and include art, science, and music rooms along with a media center and multipurpose room. The facility will integrate the district's "Policy 9040" for high performance design criteria with certification through the US Green Building Council's LEED® Green Building Rating System. Sustainable technologies and design strategies used include:

- location on a previously developed site in a neighborhood with nearby public transit, new bike paths and pedestrian access to basic services;
- comprehensive stormwater management plan to reduce runoff through features such as a rainwater cistern and porous concrete;
- vegetated roof areas to further manage stormwater through plant absorption, while providing a unique learning environment for science classes;
- plumbing fixtures and landscape irrigation that utilize captured rainwater from the cistern to reduce the strain on potable drinking water supplies;
- photovoltaic panels to convert solar energy into electricity that will be sold back to the power grid, coupled with solar thermal panels to generate hot water;
- east-west building orientation with carefully designed windows and clerestories to maximize daylight in classrooms and reduce the energy spent lighting;
- "deconstruction" strategies to salvage as many intact materials as possible from the existing buildings being replaced, followed by the recycling of at least 75 percent of construction waste;
- unique interior finishes made from rapidly renewable materials such as cork, wheatboard and bamboo;
- low-emitting building materials that protect indoor air quality; and
- educational displays and curriculum integration, including a building "dashboard" in the lobby, to create a learning environment that features the school as a teaching tool.