Building: McGinnis Education Center

Opened: 2005

Location: Sharpsburg, PA

Size: 12,000 sq/ft, 2 Stories

LEED Rating: LEED NC Registered

Description: The McGinnis Education Center reflects the Boy Scouts of America's emphasis on protecting, preserving and conserving the natural environment. Just six miles from downtown Pittsburgh, the building provides year-round camping and education programs for at-risk and urban youth. The Center's master plan incorporated a sustainable building approach, using the U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System as a guideline. Comprised of two buildings joined by a mechanical room, the McGinnis Center includes a dormitory, an education wing with a large meeting/dining room, two conference rooms and a kitchen.

Because the McGinnis Center is truly an education center, a series of informational signs throughout the building calling attention to the materials and technologies that make it a green building. Some of the Center’s green building components include expanded polystyrene (EPS) insulating concrete forms (ICFs), waterless urinals, recycled carpet, low-flow fixtures and water-efficient landscaping with indigenous plants. The building visibly demonstrates its reduced ecological footprint to visitors, including cut-away views of the ICF and wheat board walls.

Building Statistics: The McGinnis Education Center was designed for durability, easy maintenance and energy efficiency. Architect Gary Moshier, AIA and LEED-Accredited, chose EPS insulated concrete forms for wall construction. The ICFs provide two-and-a-half times the insulation value required by code and meet the structural need of having the rear wall act as a retaining wall. The facility's energy consumption is modeled to be 55 percent more efficient than the ASHRAE standard due to the thermal performance of the ICF walls, along with R-30 roof construction, energy recovery ventilation units, efficient fluorescent lighting and daylight harvesting. To help portray an authentic camp building, the Boy Scouts opted to forgo air conditioning - the insulation and natural and mechanical ventilation keep rooms cool in warm weather.