



NEW JOINT FORCE HEADQUARTERS PINEVILLE, LOUISIANA

12.0% reduction in energy costs
(LEED)

34.4% reduction in water use

95.3% of construction waste
diverted from the landfill

LEED Facts

New Joint Force Headquarters
Pineville, Louisiana

LEED for New Construction Version 2.2
Certification awarded June 8, 2009

Certified 30

Sustainable Sites 6/14

Water Efficiency 5/5

Energy & Atmosphere 2/17

Materials & Resources 5/13

Indoor Environmental Quality 9/15

Innovation & Design 3/5

*Out of a possible 69 points

NEW JOINT FORCE HEADQUARTERS

Camp Beauregard Receives LEED Certification

PROJECT BACKGROUND

The Joint Forces Headquarters project, Camp Beauregard, Pineville, LA, provides the Louisiana National Guard with a new two-story 68,360-sq-ft Joint headquarters facility along with a single-story 2,700-sq-ft JOC Emergency Vehicle Storage facility, a 2,600-sq-ft Entry Guardhouse, and other support facilities. Originally designed to meet the Army's SPiRiT Gold standard (the Army's Sustainable Project Rating Tool was based on LEED-NC 2.0), the project sought and was among the first Army projects to achieve formal USGBC LEED certification.

STRATEGIES AND RESULTS

The Joint Forces Headquarters' site provides bicycle racks, and shower /changing facilities to encourage alternative transportation use. Parking spaces have been set aside for high occupancy vehicles and spaces limited to 46% of the estimated facility occupants. Open space on the project site is 544,500 square feet, more than 14 ½ times that of the building footprint. Special care was taken to control storm water runoff. By using detention ponds and increased turf areas, runoff has actually be reduced below predevelopment quantities. Highly reflective concrete and grass paving have been employed to reduce heat islands.

No permanent landscaping and irrigation systems have been installed. The Headquarters utilizes low-flow toilets and urinals, greatly reducing the amount of sewage generated. Given the high male to female ratios, a 52.7% reduction in potable water use for sewage conveyance has been achieved. Similarly, use of low flow fixtures reduced the amount of potable water consumed by 34.4%.

The Joint Forces Headquarters project utilized Trane TRACE 700 to model a facility energy cost reduction of 12% over the ASHRAE 90.1-2004 baseline. An independent 3rd party Commissioning Agent (CxA) was hired to perform the commissioning services for the project. Commissioned systems included: chilled water system, heating water system, air handling system, terminal units, exhaust and supply systems, facility control system (building automation), pipe cleaning and flushing, vibration and sound tests, lighting control and emergency power systems.

A separate room has been provided for the storage of plastic, metal, paper, cardboard and glass recyclables. A carefully monitored construction waste management plan resulted in more than 95.3% of waste diverted from the landfill. The project achieved a combined recycled content of 17.1% , with 21.7% of the materials from within a 500 mile radius.

Indoor air quality was closely managed during construction and before occupancy, and a flush-out conducted in lieu of that air quality testing. Adhesives and sealants, paints & coatings, carpet systems, and composite wood and agrifiber products all feature low volatile organic compounds and chemical emissions. Lighting control systems consisting of daylighting sensors, multi-level switching, and occupancy sensors combine to conserve energy on days where natural light can provide adequate illumination. The HVAC systems are designed to comply with ASHRAE Standard 55-2004 and ASHRAE 62.1-2004 and a thermal comfort survey will be presented to the occupants of the building within a period of 6-18 months post-occupancy.

The project achieved an innovation in design credit for exemplary performance for achieving a construction waste diversion rate of 95.3%.



Louisiana Army National Guard

Architect: Alliance Inc.
Civil Engineer: Alliance Inc.
Commissioning Agent: Oak Point Associates
Contractor: Walton Construction
Electrical Engineer: Purtle & Associates
Interior Designer: Alliance Inc.
Landscape Architect: Alliance Inc.
LEED Consultant: HDR Architecture, Inc.
Lighting Designer: Purtle & Associates
Mechanical Engineer: Purtle & Associates
Owner: Louisiana Army National Guard
Owner's Representative: Jacobs Engineering Group
Plumbing Engineer: Purtle & Associates
Project Manager: Walton Construction
Structural Engineer: Logan Patri

Project Size: 66,941 square feet
Total Project Cost: \$32,934,569
Cost per square foot: \$492

Photography Courtesy of: Alliance, Inc.

ABOUT LEED

The LEED green building certification program is the national benchmark for the design, construction, and operations of green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about LEED and green buildings.

Louisiana Army National Guard
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 Construction and Facilities Management Office

