



GROW THE FORCE (GTF) JACKSON AVE BARRACKS JOINT BASE LEWIS-MCCHORD, WA

36.4% reduction in energy costs
(LEED)

42.7% reduction in water use

85.5% of construction waste
diverted from the landfill

LEED Facts

GTF Jackson Ave Barracks
Joint Base Lewis-McChord, WA

LEED for New Construction Version 2.2
Certification awarded December 10, 2010

Silver **35**

Sustainable Sites 10/14

Water Efficiency 4/5

Energy & Atmosphere 4/17

Materials & Resources 6/13

Indoor Environmental Quality 8/15

Innovation & Design 3/5

*Out of a possible 69 points

GTF JACKSON AVE BARRACKS

Fort Lewis Earns LEED Silver for Barracks

JOINT BASE LEWIS-MCCHORD (JBLM) SUSTAINABILITY GOALS:

1. Air Quality:
 - a. Reduce installation stationary source and non-tactical motor vehicle air emissions by 85% by 2025.
2. Energy:
 - a. Reduce total energy consumption by 30% by 2015.
 - b. Sustain all activities on Post using renewable energy sources and generate all electricity on post by 2025.
3. Sustainable Community
 - a. Create sustainable neighborhoods for a livable JBLM community that enhances the Puget Sound Region.
4. Products and Materials
 - a. Recycle all material use to achieve zero net waste by 2025.
5. Sustainable Training Lands
 - a. Maintain the ability of JBLM to meet its current and future military missions without compromising the integrity of natural and cultural resources, both on the installation and regionally.
 - b. Recover all listed and candidate federal species in the South Puget Sound Region.
6. Water Resources
 - a. Treat all wastewaters to Class A reclaim standards by 2025 to conserve water resources and improve Puget Sound water quality.

PROJECT BACKGROUND:

Designed with Joint Base Lewis-McChord's sustainability goals as a top priority, the UEPH project achieved a high Silver rating without sacrificing quality or comfort. These barracks feature garden style apartments with a kitchenette, washer and dryer unit, full bath, two walk-in closets, and an eating area in each unit. The end results are three facilities which house 300 personnel with a semi-enclosed courtyard and a visitor center intended to perform both as a visitor center and community area as a pool table is included.

STRATEGIES AND RESULTS

To achieve a high silver rating, the facilities utilized site design strategies such five infiltration basins to achieve zero net runoff of stormwater, bicycle storage spaces, reserved parking spaces for low emitting and fuel efficient vehicles, a highly reflective roof, water efficient landscaping, maximized open spaces and site light pollution reduction.

Through architectural and engineering design strategies, the facilities utilized measures which included optimal building orientation, day lighting, building envelope efficiencies, optimized energy performance, enhanced refrigerant management, thermal comfort, increased ventilation, and energy and water efficient fixtures.

During construction, several innovative techniques were implemented and closely monitored. These included waste management techniques which resulted in 85.5% of waste being diverted from the landfill, 22.12% of materials installed were from post and pre consumer recycled content, low VOC content of all adhesives, sealants, paints and primers, and an indoor air quality plan to ensure that all occupants during and after construction have clean air to breathe.

ABOUT JOINT BASE LEWIS-MCCHORD

On Oct. 1, 2010, a process that began five years ago culminated when Joint Base Lewis-McChord reached its final operational capability and was formally established as one of 12 joint bases worldwide. Merging Fort Lewis and McChord Air Force Base, the creation of JBLM was directed as part of a 2005 Base Realignment and Closure action. With the establishment of the joint base, all installation support functions are provided by the Army-led Joint Base Garrison to all the services on the base - Army, Air Force, Navy and Marines.

"Through an integrated design and construction process the GTF Jackson Avenue Barracks provides an environmentally responsive home for 300 of this country's greatest assets, it's soldiers. With occupant comfort and health in mind, the complex utilized varied USGBC green design techniques to achieve its LEED Silver certification."

John Rhebergen, AIA, LEED AP BD + C, Vice President of GLMV



U.S. Army Engineer District, Seattle

Architect: GLMV Architecture, Inc.

Civil Engineer: PEC Engineers

Contractor: MW Builders, Inc.

Mechanical Engineer: LST Consulting Engineers

Owner: Fort Lewis Directorate of Public Works

Project Manager: GLMV Architecture, Inc.

Project Size: 115,748 square foot

Total Project Cost: \$26,982,901

Cost per square foot: \$204

Photography Courtesy of: MW Builders, 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.

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JBLM

