



HACKER

Woodland Community Library

Pursuing LEED Silver Certification

What is LEED?

Woodland Community Library is targeting Leadership in Energy and Environmental Design (LEED) Silver certification. Developed by the US Green Building Council, LEED is an internationally recognized green building certification program, providing third party verification that recognizes best-in-class building strategies and practices. LEED promotes a whole-building approach to sustainability by recognizing performance in key areas of human and environmental health: Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Visit the U.S. Green Building Council's website at www.usgbc.org to learn more about LEED and green building.



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Woodland Community Library, the newest addition to the FVRLibraries system in Woodland, Washington, serves as an iconic landmark and gateway for the community. The building offers a range of spaces for both children and adults, including a large Community Room designed for cultural and social events, and Study Rooms that provide quiet areas for focused work. The library improves access to e-content in various formats and is adaptable to emerging technologies. Its design also integrates the natural landscape of Woodland.

OWNER

Fort Vancouver Regional Libraries (FVRLibraries)

PROJECT TEAM

Architecture + Interior Design: Hacker

General Contractor: Bremik Construction

Structural Engineer: KPFF

MEPT Engineer: PAE

Lighting Design: O- Lighting Design

Acoustical Consultant: Listen Acoustics

Civil Engineer: PBS Engineering and Environmental

Landscape Architect: PLACE

Sustainability Consultant: Lensa Consulting

Building Enclosure Consultant: RDH Building Science

Commissioning Authority: Coffman Engineers



Key Sustainability Strategies based on LEED categories

Integrative Process

- Implemented an integrative process incorporating sustainability throughout design and construction

Location and Transportation

- Centrally located to various amenities and services

Sustainable Sites

- Site analysis helped inform site selection and design decisions
- Incorporating accessible and usable open spaces
- Light-colored paving materials at entry and sidewalks and trees for shade
- Onsite management of stormwater runoff

Water Efficiency

- 31% reduction in potable water use with low-flow faucets for lavatories and sinks, and low-flush water closets
- 93% reduction in potable water use for irrigation based on species selection and efficient irrigation system, in addition to eliminating irrigation for certain areas
- Design incorporated all gender restrooms to allow restroom access for all building occupants

Energy & Atmosphere

- 41% more energy efficient compared to the LEED ASHRAE code baseline with selection of energy efficient systems and high-performance building envelope
- All electric building with lower carbon emissions than other fuel sources
- Energy based systems commissioned to optimize performance and durability
- Electrical submetering of various energy uses enables tracking of energy usage and monitoring of the building's performance

Materials & Resources

- Design incorporated the use of natural materials and finishes
- Materials with recycled content, certified wood, or other environmental merit
- Selection of products with Environmental Product Declarations or material ingredient reporting

Indoor Environmental Quality

- Excellent indoor air quality with effective ventilation and high-level filtration
- Multi-level lighting controls for spaces to ensure visual comfort
- Eliminated the use of mercury lamps with purchase of LED lamps only
- Acoustical treatment of spaces to ensure auditory comfort and a conducive learning environment
- All regularly occupied rooms have views to the outdoors
- Implemented a construction indoor air quality management plan, to minimize indoor air quality issues and promote the wellbeing of the construction workers and building occupants
- Use of low-emitting materials including paints and coatings, insulation, composite wood, flooring, adhesives and sealants, wall and ceiling products

Innovation

- Created a team focused on social equity, and providing opportunities for small businesses, women and minority owned businesses
- Adopted green cleaning practices and an integrated pest management plan to minimize use of harsh chemicals and pesticides, and promote better air quality, human health, and productive environment