



City of Bothell™  
**PUBLIC WORKS**  
 21233 20TH Avenue SE  
 Bothell, WA 98021

## For More Information

To find out more about Bothell's LEED Certification and to learn about all the other ways we're working to make the City a greener place, visit [www.ci.bothell.wa.us](http://www.ci.bothell.wa.us) and search "Green".



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**Bothell**COOL<sub>2</sub>

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City of Bothell™

# Public Works Operations Center LEED Certification

## WHAT IS LEED CERTIFICATION?

LEED stands for Leadership in Energy and Environmental Design. Certification is obtained through the Green Building Certification Institute (GBCI). The process is voluntary yet technically rigorous, and it demonstrates an organization's innovation, leadership, and environmental stewardship. Buildings that are LEED-certified are meant to:

- Conserve energy and water
- Reduce waste
- Lower operating costs
- Reduce harmful greenhouse gas emissions
- Be healthier and safer for occupants
- Demonstrate social responsibility

LEED buildings are scored on a 100-point scale with bonus point options, and the final score determines what level of certification they receive. There are four levels: Certified (40-49 pts), Silver (50-59 pts), Gold (60-79 pts), and Platinum (80-110 pts). Performance is measured in a variety of categories:

- Site Sustainability
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Locations and Linkages
- Awareness and Education
- Innovation in Design

## HOW GREEN ARE WE?

Washington has 803 registered and 311 certified LEED projects on file with the USGBC (as of 10/3/10), ranking us #10 in the U.S. for total number of LEED projects. *This excludes homes and neighborhood development projects.*



## Our Values

*Pride in our Work  
 Excellence in our Service  
 Sustainability in our Practices*

## City of Bothell Public Works Administration Building is LEED Silver Certified!

### BY PURSUING LEED SILVER CERTIFICATION,

the City of Bothell has made the commitment to implement measures throughout design and construction of the Public Works Operations Center that focus on careful construction practices, non-toxic material selections, efficient lighting and ventilation equipment, and a healthy, comfortable indoor environment.

Read on to learn about the key sustainable measures that were incorporated into the Administration Building.

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## Green Materials Used in Office Furniture

All office furniture for the Administration Building was purchased from Correctional Industries. It was manufactured using sustainable materials and practices.

Here are the standards for the furniture in this building:

### WOOD

Plywood meets all NAUF (No Added Urea Formaldehyde) standards; Particleboard is made with 100% wood with NAUF.

### ALUMINUM

Window/open frame components in panel systems have recycled content of 25%.

### STEEL

Cold-rolled steel in mounting brackets has recycled content of 50%.

### PANEL FABRICS

Privacy screens and acoustical panels are 100% recycled polyester.

### CHAIR FABRIC

Fabric is 100% recycled polyester reclaimed from plastic bottles.

### FOAM

Seating products contain foam without chlorofluorocarbons.

### METAL FINISHES

Standard metal components are finished using solvent-free electrostatically applied powder-coat paint that emits no VOCs.

### ADHESIVES

Adhesives are nontoxic, water-based, and do not emit VOCs.



## 87% less water used than typical irrigation systems

by selecting drought tolerant landscape plantings and highly efficient drip irrigation.



## SUSTAINABLE SITES:

The building site was selected to provide a neighborhood location with accessibility to bus or bicycle routes and convenient access to community services.

These features make it easier for employees on site to reduce their impact on the local environment by reducing the number of Single Occupancy Vehicle (SOV) trips. Showers are provided on site for employees who bike/walk to work.

Visitors to the site benefit with preferred parking spaces closer to the entrance because they reduce impacts to local air quality by carpooling or driving low carbon emission and fuel efficient vehicles.

The site location also has the ability to preserve as much pervious ground area as possible to minimize impacts to the site's micro-climate and natural hydrology. All stormwater is treated before it leaves the site.

## WATER EFFICIENCY:

Internal reduced water usage is achieved through dual flush toilets, waterless urinals and other low flow water fixtures which reduce water inside the building by a projected 40% over conventional fixtures.

The outdoor landscape features carefully selected drought tolerant landscape plants and highly efficient drip irrigation system to reduce water used for irrigation by 87% over typical irrigation systems.

## ENERGY AND ATMOSPHERE:

The reduction of energy consumption requires a tight thermal envelope and efficient energy systems. The design of the building incorporated features to achieve this with:

- a light colored roof to keep energy usage down by keeping the building cooler through the deflection of solar heat gain in the summer.
- increased insulation in roof, walls and floors along with thermal windows.
- occupancy sensors automate lighting in spaces only used infrequently.
- highly efficient HVAC and domestic hot water equipment complete the building systems.

To ensure that all the building's energy systems function just as intended and at peak efficiency, a third party commissioning authority reviewed

the design of all energy systems and equipment specifications, observed installation, oversaw functional testing, and made sure that on-site staff were fully trained and familiar with all the necessary operating procedures.

## MATERIALS AND RESOURCES:

- More than 95% of construction debris was diverted from the landfill.
- 26% of overall building material costs were comprised of recycled content.
- More than 80% of the wood materials used was harvested from Forest Stewardship Council certified sustainable forests.



## INDOOR ENVIRONMENTAL QUALITY:

An indoor air quality plan, adopted to guide construction practices. The plan minimized the intrusion of dust and particulates and protected building materials from mold and other contaminants throughout the construction process to prevent pollutants from entering the building.

Only low VOC adhesives, paints and coatings and NAUF composite woods were used inside the building to minimize off gassing of chemical toxins during construction.

Ventilation in the building maximizes fresh air in the breathing zone and uses CO2 sensor controls to manage fresh air in densely occupied spaces, like meeting and training rooms.

Daylight and views are enhanced by skylights and large thermal windows.

After construction was complete, the building was flushed for 10 days with 100% fresh air to remove any lingering contaminants.

Occupants also have access to task lighting and thermal comfort controls to provide maximum control over individual work areas.

## SEE IT Features of the Administration Building



Natural Light



Eco-Friendly Building Material



Reduction of Waste



Encouraging Less Vehicle  
Emissions



Space Conservation with  
Multipurpose Rooms