

PACIFIC UNIVERSITY

1849

O R E G O N

GREEN BUILDING HANDBOOK

RESIDENT GREEN BUILDING HANDBOOK

A green building makes economic and environmental sense.

PACIFIC UNIVERSITY
— 1849 —
O R E G O N

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OUR COMMITMENT

Pacific University is committed to responsible development in building design and construction. We have targeted a LEED™ Gold rating from the U.S. Green Building Council for Burlingham Hall placing it as one of the first LEED certified residential buildings in the country. Residential buildings are rapidly joining the ranks of buildings aiming to achieve certification through the LEED process.

From the architect and contractor to the mechanical and electrical engineers, the project team diligently pursued an integrated design process to make Burlingham Hall a model for environmentally-responsible residential building and a pleasant living environment for our student residents.

Our goal is to educate you about the building's green elements and the building programs that are offered in keeping with the project's green building philosophy. This handbook summarizes the environmental design elements of Burlingham Hall including a detailed outline of the measures implemented that contribute to achieving LEED Gold certification.

We sincerely hope you will be inspired by the many benefits that are enjoyed by choosing energy and resource-efficient alternatives for the design and construction of your new home.

Why is it Important?

- Buildings consume 40% of all material and energy flows
- Buildings and their construction consume 54% of all U.S. energy either directly or indirectly
- Buildings account for 35% of the CO₂ emissions in the U.S. Green building practices provide the framework and tools to build in an efficient, healthy, and ecologically responsible manner.

WHAT IS GREEN BUILDING?

- Considers the true costs of building and site impacts on the local, regional, and global environment through life-cycle costing and assessment
- Uses natural resources efficiently, maximizes the use of local materials, and eliminates waste
- Reduces building ecological footprints allowing ecosystems to function more naturally
- Optimizes climatic conditions through site orientation and design
- Uses energy efficient systems and materials
- Integrates natural daylight and ventilation and improves indoor air quality
- Plans for future flexibility, expansion, and building demolition
- Reduces, reuses, and recycles materials in all phases of construction and deconstruction
- Minimizes the use of mined rare metals and persistent synthetic compounds
- Conserves and reuses water and treats storm water runoff on-site
- Encourages a transit-, bicycle-, and pedestrian-oriented project
- Includes advanced telecommunications technology allowing greater electronic access and reducing the need to travel
- Improves acoustics and reduces noise levels



HERE IS WHAT WE HAVE DONE AT BURLINGHAM HALL

Energy Efficiency

Burlingham Hall was designed to reduce energy use by 33% over national standards through:

- High performance windows and glazing to maximize interior daylight while reducing heat transfer
- High-efficiency lighting systems
- Programmable thermostats
- Lighting sensors in regularly occupied spaces
- Highly efficient insulation of the building envelope to reduce building heating and cooling demands
- High-efficiency domestic hot water system
- Energy Star® washers, dryers, and residential appliances
- Additional building commissioning to verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended

Resource Efficiency

- Interior recycling and sorting facilities for all residents
- Recycled over 75% of construction waste materials
- Preference given to materials that contain recycled content and that are manufactured locally
- Preference given to materials that are extracted locally reducing the embodied energy associated with transportation

Water Efficiency

Burlingham Hall was designed to reduce water usage over a base building by over 30% through:

- Low-flow/ultra low-flow kitchen and bath fixtures
- Zero irrigation landscaping

As you can see, a great deal of time and effort has been spent by the project team in evaluating and incorporating as many environmentally responsible features as possible into the overall design of Burlingham Hall.



Indoor Air Quality

- Operable windows allow for natural ventilation
- Specified low-toxicity building materials and finishes to prevent persistent off-gassing
- Walk-off mats at main building entries reduce indoor air pollutants
- Safer, environmentally responsible janitorial services and green cleaning supply program for residents
- Smoke-free environment

Environmental Responsibility

- Transit-supportive project including carpooling opportunities, a bus line within a few blocks, and a campus shuttle
- Covered bike parking and storage
- Highly reflective materials on roof and impervious surfaces such as sidewalks to reduce heat island effect
- Environmentally-appropriate landscaping with drought-tolerant and native species
- Exterior and interior lighting designed to minimize glare of adjacent properties and reduce light pollution
- Stormwater bio-swales and bio-filtration to reduce the rate, quantity, and contamination of rainwater runoff



GREEN BUILDING PROGRAMS

We are excited to offer you several important programs in keeping with the green building philosophy that was a key component of the design and construction processes.

Green Building Educational Program

We encourage you to take a look at the educational signage located at the main entry of Burlingham Hall. The signs highlight many of the energy and resource efficient measures that have been incorporated into the building including water efficiency, energy conservation, material and resource usage, air quality, and innovative green building policies.

Pick up a brochure near the signs to go on a self-guided walking tour of Burlingham Hall. On the tour, you will see many of the environmental design elements that have been implemented to make Burlingham Hall a healthy place to live and work.

Green Cleaning Products Program

Environmentally responsible cleaning is the use of products and/or processes that reduce or eliminate any negative impact of cleaning on human health and on the environment.

Conventional cleaning products often contain ingredients that are harmful to humans and the environment. Traditional cleaning methods such as feather dusting tends to disburse dust in to the air causing it to resettle elsewhere as opposed to eliminating the particles altogether.

In keeping with our collective environmental consciousness, a partnership has been formed with Coastwide Laboratories, the leading manufacturer of people- and planet-friendly cleaning products in the Northwest, for the provision of environmentally friendly cleaning supplies and products. All residents of Burlingham Hall are offered green cleaning products for six months. Two spray bottles for these cleaning products are being provided to each tenant upon move-in.

Resources for Green Cleaning

Coastwide Laboratories

Leading manufacturer of people and planet-friendly cleaning products in the Northwest
800.775.3289

www.coastwidelabs.com



*Resources for Recycling***Metro's Recycling Hotline**

503.234.3000

Earth 911www.earth911.org**EPA's Reduce, Reuse, and Recycle**www.nrc-recycle.org**National Recycling Coalition**Learn where to recycle even
the most unusual items[www.epa.gov/epaoswer/non-hw/
muncpl/reduce.htm](http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm)*Resources for Alternative
Transportation***Real-time bus arrivals**www.nextbus.com**Tri-Met**

503.238.RIDE

www.trimet.org**Pacific University Listserve**bhh@lists.pacificu.edu

Included with your move-in materials are summary sheets on the two products provided. One bottle, the one light blue in color, contains a glass and surface cleaner (SE 61). The other product, which is light yellow in color, is a pH neutral all-purpose cleaner (SE 64). Following is a summary of which product to use for different cleaning tasks:

- Glass and Mirrors.....SE 61
- Light Cleaning of Walls,
Countertops, Cabinets.....SE 61
- Marble Surfaces and Wood Floors.....SE 64
- Carpet Spot Cleaning.....SE 64
- Tub, Sink, and Toilet Cleaning.....SE 64
- Heavy Wall Cleaning and
Kitchen Degreasing.....SE 64

The cleaners are most effective if they are allowed to maintain contact with the soiled surface for a few moments before you scrub or wipe. For light duty cleaning, spray or pour cleaner directly on a wiping cloth. This prevents the cleaner from being inhaled and gives better control near delicate surfaces.

Also, keep in mind that dusting with lint-free damp or micro-fiber cloths folded like a handkerchief to expose multiple sides for absorbing dust will prevent stirring dust particles into the air where people can inhale the particles.

By using these products, you will help maintain a healthy home environment for yourself and your fellow residents.

Building Recycling Program

Recycling is an essential component of Burlingham Hall's operation program. The building was specifically designed so that each residential floor has a trash closet with recycling bins. Paper, magazines, cardboard, glass, tin, and plastics can all be recycled. Other items may be identified for recycling as space and use is determined upon building occupancy. We hope the convenience of these facilities will encourage you to recycle regularly.

TRANSPORTATION OPPORTUNITIES

You can take advantage of the various transit options available to get around town. To find carpool and ride-share opportunities, check the Rider Board adjacent to the main reception desk and sign up for the campus-wide listserv at: bhh@lists.pacificu.edu. Covered bicycle parking is available. Tri-Met's number 57 bus line is within a few blocks of Burlingham Hall.

SUGGESTIONS FOR GREEN LIVING

Energy conservation. There are some simple steps you can take in your home to reduce energy consumption.

- Turn off appliances, lights, TVs, and computers when not in use
- Use your programmable thermostat to automatically turn down the temperature at night and when no one is home
- Choose Energy Star compact fluorescent lights bulbs which use 75% less electricity and last ten times longer than conventional incandescent bulbs
- Close your drapes and blinds during the day when no one is home to reduce energy transfer to the outside and unwanted heat gain from the outside

Water conservation. By using water more efficiently, you can save energy and reduce the water consumption.

- Run the washing machine only when it is full
- Turn off running water as often as possible while doing household chores such as cleaning

Resources for Energy Conservation

Energy Star

www.energystar.gov

City of Portland, Office of Sustainable Development

Resources for energy conservation
www.sustainableportland.org

Energy Guide

Find energy efficient products, analyze your energy use, and learn about conservation
www.energyguide.com

Water-Use It Wisely

Tips to save water
www.wateruseitwisely.com



Thank you for taking the time to read about the energy and resource-efficient elements of Burlingham Hall. We appreciate your commitment to environmentally responsible living and participation in the green building programs we have implemented and encourage you to follow.

Each step Pacific University takes in creating healthy, green spaces in which to live and work helps to preserve precious natural resources and has an enormous impact on the ecological well-being of our neighborhood, our community, and our world.



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