ECOROOFs

An ecoroof is a lightweight, self-sustaining roof system consisting of vegetation and 2-6 inches of soil.

Ecoroofs provide multiple benefits, including:

- Mitigating stormwater peak flows, reducing flow volumes and improving water quality.
- Absorbing heat and reducing the urban heat island effect.
- Creating habitat for birds and invertebrates.
- Insulating structures and conserving energy by lowering heating and cooling needs.
- Absorbing carbon and producing oxygen.
- Filtering particulates from the air.

A BRIEF HISTORY OF ECOROOFs IN PORTLAND

1996
First ecoroof installed on a residential garage.

1999
The ecoroof is officially recognized as a stormwater management technique.
Hamilton Apartments ecoroofs are completed and monitoring begins.

2001
Zoning code is amended to include ecoroofs as a floor area ratio bonus option in the central city.

2004
City sponsors Greening Rooftops Conference in Portland

2005
Green Building Resolution adopted stating all city-owned buildings will have at least 70% ecoroof coverage.

2006
The Clean River Rewards program begins, offering stormwater fee reductions for ecoroofs.
ECOROOFs

A River Renaissance

The Willamette River is at the heart of Portland’s economy, history, landscape and culture. Growth and prosperity have placed a heavy burden on Willamette Valley rivers and streams. These waterways and their fish runs face many critical challenges: pollution, sewer overflows, erosion, and the loss of trees and wildlife habitat.

Ecoroofs are an important part of Portland's efforts to reduce the negative impact of unmanaged stormwater runoff on rivers and streams.

Environmental Services and the Office of Sustainable Development promote the use of ecoroofs, research ecoroof technology and give information and technical assistance to building owners who are considering installing an ecoroof.

Portland's Ecoroof Program

Research
Environmental Services monitors and evaluates ecoroofs in Portland to gather data on how effective they are in reducing stormwater runoff and improving water quality.

Education
Environmental Services staff provide technical assistance, tours, presentations and online resources for interested citizens and people installing ecoroofs.

Funding
City grants have funded ecoroofs ranging from high rise apartment complexes and office buildings to small park shelters and community based projects.

Policy
The City encourages ecoroof construction through building and zoning codes. New development is required to treat all stormwater on site and an ecoroof is an approved treatment facility. Development in the nine square miles of central Portland is eligible for Floor Area Ratio bonuses for installing an ecoroof. Through Clean River Rewards, stormwater fee discounts are available to properties that reduce impervious area with ecoroofs.
1. The Portland Building  1120 SW 5th Ave.

Type: Reroof
Completed: 2006
Ecoroof square footage: 18,000
Soil depth: 3 inches
_Not accessible to the public_
2. Hamilton West Apartments 1212 SW Clay St.

Type: New construction
Completed: 1999
Ecoroof square footage: 6000
Soil depth: 3-5 inches
*Not accessible to the public*
3. Native American Student and Community Center  710 SW Jackson St.

Type: New roof garden
Completed: 2003
Ecoroof square footage:  4000
Soil depth:  12-24 inches
Accessible to the public
4. The Meriwether Condominiums  3570 SW River Pkwy.

Type: New construction  
Completed: 2007  
Ecoroof square footage: 41,400  
Soil depth: 3 inches  
*Not accessible to the public*
5. Multnomah County Building  501 SE Hawthorne Blvd.

Type: Reroof
Completed: 2003
Ecoroof square footage: 12,000
Soil depth: 6 inches
Accessible to the public

Type: Reroof
Completed: 2002
Ecoroof square footage: 650
Soil depth: 3 inches
Visible from the sidewalk
7. Buckman Terrace Apartments  303 NE Sandy Blvd.

Type: New construction
Completed: 2000
Ecoroof square footage: 1700
Soil depth: 3-8 inches
Not accessible to the public
8. Metro Regional Center  600 NE Grand Ave.

Type: Reroof
Completed: 2005
Ecoroof square footage: 2500
Soil depth: 3 inches
Accessible to the public
9. Whitaker Ponds Natural Area  7040 NE 47th Ave.

Type: New construction  
Completed: 2000  
Ecoroof square footage: 500  
Soil depth: 4 inches  
Visible
10. Cathedral Park Place  6635 N Baltimore Ave.

Type: Reroof  
Completed: 2005  
Ecoroof square footage: 7100  
Soil depth: 3 inches  
Accessible to the public
Residential Ecoroofs

Type: New or reroof
Over 25 built in the city
Visit
www.portlandonline.com/sustainablestormwater
to access our ecoroof case studies, vegetation and monitoring reports, resource list and more.