Green Roof

1595 Wynkoop Street

EPA's regional headquarters at 1595 Wynkoop St. includes one of the first green roofs of its kind in the state of Colorado. The roof provides air and water quality benefits and reduces building heating and cooling needs.

The primary objective of the roof is to absorb precipitation and release it at a reduced and measured pace. The green roof will reduce peak flow and runoff volumes from rain and snowmelt events to mimic a more natural landscape. This process will minimize impacts to the South Platte River from concentrated stormwater runoff.



Design Statistics

- Vegetated roof covers approximately 20,000 square feet on three terrace levels
- Modular trays (2-feet by 4-feet) hold 4" of engineered growth medium
- Plants exclusively from six sedum species make up plant community
- Approximately 40,000 plants

Environmental Benefits

- Improves water quality runoff by retaining and filtering pollutants held in rainwater
- Reduces storm drainage system loads
- Reduces "heat island" effect
- Filters air pollutants deposited from atmosphere and stores carbon dioxide
- Mitigates smog formation
- Serves as living environment that provides habitats for birds and other small animals
- Insulates building reducing heating and cooling needs
- Offers an attractive alternative to traditional roofs
- Helps insulate building

Economic Benefits

- Longer service-lifespan than conventional roofs, vegetated roof protects surface from UV rays, hail
- Decreases costs associated with installation of stormwater detention and treatment system
- Lower stormwater utility fees assessed by local utility
- Enhances resale value of property
- Energy cost savings

What You Can Do at Home

While green roof applications in the U.S. are often associated with large commercial buildings, more and more homeowners are taking advantage of the benefits that green roofs provide. In many cases, the insulation benefit alone can save 30-40% on heating and cooling costs. In Europe, the use of green roofs in private homes is relatively common. For more information, check out some of the resources below.



For More Information

www.epa.gov/region8/greenroof/ www.epa.gov/heatisland/strategies/greenroofs.html www.greenroofs.com/; www.greenroofs.net/

