

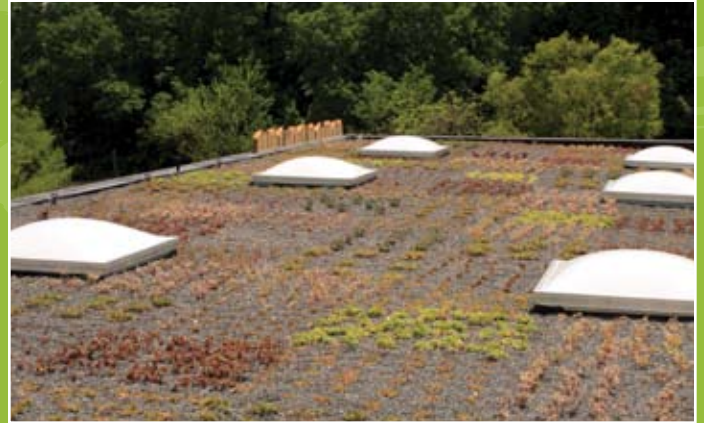


What's Up with Green Roofs?

What is a Green Roof?

A green roof is a roof that consists of living plants in place of traditional roofing.

Stop by Giraffe Ridge to see the building's 2,400 square foot green roof, planted with a variety of sedum and other plants.



How is it Green?

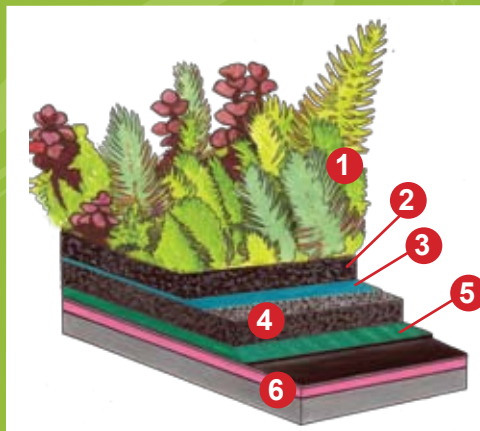
The environmental benefits of a green roof include:

- Decreased use of energy to heat and cool the building
- Reduced storm water runoff, thus lessening the impact of flooding, pollution, and erosion
- Added green space for wildlife
- Reduced reflection of sunlight and heat back into the environment

How Does it Work?

A green roof consists of layers that work together to protect the building while lessening its impact on the environment. The layers include:

- 1. Vegetation:** Plants that are hardy, low-growing, shallow-rooted, perennial, and rely less on nutrients than typical plants are planted on a green roof.
- 2. Growing media:** The growing media is usually a layer of inorganic materials such as sand or pebbles, mixed with a small amount of organic compost.
- 3. Filter layer:** A semi-permeable filter cloth separates the growing media from the drainage layer to avoid clogging.
- 4. Drainage layer:** A layer of gravel or stones drains the excess water the plants did not use.
- 5. Protection and storage layer:** Often made of PVC, the protection and storage layer prevents roots from infiltrating the roof's foundation.
- 6. Roof deck, insulation and waterproofing:** Generally made from concrete, wood or metal, the roof deck provides the foundation of the green roof, and is topped with insulation and waterproofing layers.



Why Would I Want a Green Roof?

A green roof affords both environmental and economical benefits. It is estimated that a green roof will last twice as long as a conventional roof, which saves on maintenance and replacement costs. A green roof also reduces heating and cooling costs and provides sound insulation.

How Do I Get a Green Roof?

Since a green roof has certain foundational requirements, it is difficult to retrofit a green roof on an existing building. However, a green roof can be incorporated into the design of new buildings, including residential homes. The first step is to contact a professional contractor with experience in designing green roofs. You can locate one in your region through the searchable database at www.greenroofs.org.

Not everyone can top their home with a green roof, but we can all green up our space by planting flowers in window boxes and growing potted plants on our patios.

How Much Does it Cost?

Starting at about \$15 per square foot, the initial cost of installing a green roof varies widely depending on the type and size of the roof. Talk with a professional contractor for an estimate. Maintenance costs also vary, but are less than those of a traditional roof. If you live in Cincinnati, you may be eligible for a low-interest incentive loan for constructing a green roof. See below for contact information.

For More Information

Green Roofs for Healthy Cities,
www.greenroofs.org

City of Cincinnati Green Roofs Program,
www.cincinnati-oh.gov/cmgr/pages/-38098/



Learn more about how to Go Green at www.cincinnati-zoo.org.
Click on Saving the Earth, and then on Go Green.