

September 22, 2010

[Visionaire's Green Roof and Its Many Benefits](#)

By Lisa Iannucci



Want to start greening your building? One easy way to get started is to start at the top -- on the roof. By simply planting a garden on your roof, you can benefit by saving water and energy and it's a great place for residents to spend some time.

One example of a great roof is at The Visionaire, a LEED platinum-certified, 35-story condominium located in Battery Park City. Among the building's many green features is its rooftop garden, planted with selected species of native vegetation. The roof garden provides a valuable amenity to residents and an extra layer of natural insulation for the building, which helps reduce urban heat island effect. Particularly interesting about the garden is the incorporated stormwater retention system that harvests up to 12,000 gallons of rainwater for irrigation.

I had a chance to talk to the Visionaire's resident manager Kevin Grady about the roof, its benefits and how other buildings can get started:

What does it mean to have native vegetation and what benefits are there?

Being green means deciding what's best, what lasts longest and what's the easiest to maintain. For New York, you want vegetation that is going to survive in a lot of conditions, such as sedums. Native vegetation means they are native to the Hudson Valley area and can survive the different climates here, from zero degrees to 90 degrees.

How does your roof provide a natural layer of insulation?

A New York building roof is typically made of black tar and asphalt. Ours is made of vegetation and soil; it stops the heat transfer of the roof and keeps the apartments cooler in the summer. But in the winter it doesn't allow the heat to escape.

How does it save water?

The system features mats that retain excess rainwater once soil becomes saturated during a storm. When the retention mats become full, excess water overflows into a central roof drain and is collected for use by the garden's high-efficiency drip irrigation system. The mat is an egg carton retention mat. When it rains it collects one inch of moisture. When it collects more than one inch of moisture, the water is transferred to 10,000 gallon storm water tanks that we have. Only when the water tanks are filled does the water overflow into the sewer. We use this water to wash the sidewalks and irrigate.

Are there other benefits?

The advantage of a roof like ours is that every roof has expansion and contraction, but with our roof it lasts longer. Also the water rates are going up 13% so by saving water and using it for washing cars, garages, etc., you're saving money. Every building can do something similar but perhaps lighter.

How?

It depends on the type of building, but you could start with a group of tenants who like to garden. It can be started for minimal cost and you can have a full garden and see tremendous savings. Have an engineer do a load test first to make sure the roof can support it.

For more information on starting a green roof, Grady suggests checking out [this](#) website.