

Green Roof Service LLC presents:

July 11, 2013

<a href="#">Projects</a>	<a href="#">Services</a>	<a href="#">Modern Green Roof Technology</a>	<a href="#">Living Architecture</a>	<a href="#">Resources</a>	<a href="#">About Us</a>
--------------------------	--------------------------	--	-------------------------------------	---------------------------	--------------------------



3646 Roland Avenue  
 Baltimore, MD 21211  
 Phone: 443-345-1578



**Green Roof Plant of the Month:**



Brush up on your green roof plant knowledge with a new plant every month! Only on our Green Roof Plant Blog!



### Nation's Largest Solar Garden Roof

Companies spend millions of dollars on creating rooftop farms to demonstrate how "green" they are. There is no doubt advertising with living green is a good idea because it makes the customers believe that the company practices environmental leadership. However, the reality looks very differently.



### New Sun-Root™ System Installed

Green Roof Technology worked with Prospect Solar on June 19th to successfully install a solar garden. Located in Northern Virginia, this demonstration project shows the benefits of the Solar Garden combination perfectly.



### Combining Urban Rooftop Farming with Public Transportation

Is it possible? Can our public transportation options eventually become our local farmers market too? Join us for a ride along the Lemon Line!



### Fireworks and Green Roofs

Prevent fireworks from getting the best of your building with any green roof; a much safer option that will always be less likely to catch on fire.

## Nation's Largest Solar Green Roof



*Photo courtesy of Elkus Manfredi Architects and BHC Architects.*

Green Roof Technology is proud to announce their partnership with BHC Architects to design the largest Solar Garden Roof in North America. The Solar Garden Roof will rest atop the new, soon-to-be build Exelon headquarters in Baltimore, MD.

Exelon's office tower will be the tallest building in the upcoming Harbor Point multi-use business park, scheduled for completion in Fall 2014.

The Exelon headquarters rooftop will house a 40,000 sf green roof and an estimated 400 Sun-Root™ Modules, which will generate approximately 120,000 kWh's a year. This will be the largest Solar Garden Roof in North America.

For more information about the Solar Garden Roof System and to see a short video of how it all comes together, please visit: <http://www.greenrooftechnology.com/solar-green-roof>.

## New Sun-Root™ System Installed



Last Wednesday, June 19th, Green Roof Technology traveled to Northern Virginia to help install a green roof demonstration project, complete with a Sun-Root System™. Being the latest achievement in sustainable design, the Sun-Root System™ effectively combines solar power with vegetated roofs.

Working with the company Prospect Solar, we were able to help preserve the environment and promote renewable energy. Prospect Solar was established in 2010 by the well-known Prospect Waterproofing Company. One of the leading specialty roofing companies in the DC area, they have been successful for over twenty years. Prospect Solar has been following in their footsteps, creating more sustainable alternatives to the traditional roofing practices.

## Combining Urban Rooftop Farming with Public Transportation



*Photo: Bauder, SSB Stuttgart Germany*

Germany is the country of inventors, poets and thinkers. According to historical research, rooftop farming has been a long tradition since the mid-evil times in the dense cities of Europe. The lack of open space inside city walls brought people up to their roofs. Because there was also no efficient sewer systems, it was easy to utilize the organic remains to fertilize and grow plants. Throughout the centuries, survival proved to be a tough journey, mainly caused by overpopulation. When it became too dangerous to venture from your house, people discovered their roofs as additional space for growing their own food in order to overcome these rough years. Currently we are witnessing this growing trend once again in many metropolis areas in

North America. The motivation is still the same, jobs can be hard to find, it's difficult to stand out when everyone is competing for essentially the same things.

Luckily our sewer systems are more advanced today, synthetic fertilizers are cheap and these farms do not depend on organic remains anymore. The quality of food should be acceptable in this respect - disregarding the extreme rates of pollution within cities.

However, let us backtrack to the topic of inventions.

Growing food on rooftops of the public transportation system (buses and trains) can help to combine two major needs of urban citizens. The added value is that your transportation systems are now also farmer's markets and while riding the bus home from your cubical, you can manage all your food shopping in one step including fresh produce grown directly above - on the roof! If the roof of the transportation vehicle is a semi permeable membrane, the carrots actually can be harvested from the inside. How convenient would this be? Depending on the crop, the sunny routes have more sun loving veggies and the transportation system manages regular crop changes from a more balanced and diverse food supply. Think about all the new jobs being created!



Sure, this technology is just in the beginning stages, but with the current hype for locally grown and diverse environmental approaches, it is just a matter of time until people will also jump on the bandwagon (or bus). It is just as ideal to look for some free advertising space in the press.

So, see you on the Lemon Line or drop me a line from the carrot bus (they should probably invest in free WiFi too).

## Fireworks and Green Roofs



Practically all dry organic materials are combustible at relative low temperatures. Roof shingles or many waterproofing membranes on roofs are typically petroleum-based products (including Asphalt) and they is hardly a difference to dry organic materials. Some products are equipped with chemical fire retardants that could decrease the risk of spreading fire, not the risk of leaks cause by impact.

The living vegetation of functional and well-engineered green roofs contain high moisture contents and most plants (especially succulent plants on large extensive green roofs) have a fraction of the energetic potential comparing to all other components used in a building. The green roof growing media (soil for the green roof plants) is a blend of different mineral components with an organic content of typically less that 15%. It is practically impossible to set this material on fire – not even considering the natural moisture content.

Many fires or leaks on roofs caused by consumer or display fireworks could have been prevented if the building would have had a fully functional green roof or a well-maintained conventional roof (regular removing of organic debris from the roof and gutters).

A fire is the worst-case scenario; however in most cases smoldering firework parts (and cigarettes) are causing leaks on unprotected roofs that are discovered much later. These problems are unknown on functional green roofs. When a green roof prevents a leak or even a fire it is typically not recognized but the payback is right there.

Nature is (literally) so cool.