

## **Best “Green” Practices**

### *Adding Green to Lancaster County One Roof at a Time*

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Many people are recycling, conserving and trying to adopt a green attitude at home, but then they go to work and use paper plates and cups, turn the temperatures cooler in the summer and hotter in the winter and, if they work in an office, they may use up to 10,000 pieces of copier paper per year. Many companies are starting to embrace environmentally-friendly buildings, supplies and attitudes. Google provides free buses to employees, Wal-Mart is installing solar panels on some of their stores and some companies are offering incentives to employees who buy hybrid vehicles.

In April of this year, National Novelty Brush Company collaborated with Apex Green Roofs out of Somerville, MA. The goal was to install Lancaster County’s first green roof on our new warehouse, located on Ann Street in Lancaster City. In order for our 16,900 square foot roof to be structurally sound, it needed to support 20 lbs. per square foot since they retain 70 to 90% of the precipitation that falls on them. We decided to go with an Extensive System, which is the thinnest system supporting the toughest species of plants. These systems range in depth from 3 to 6 inches, with several different layers of materials each having its own purpose. Many of the products used in the green roof came from recycled materials.

The state of Pennsylvania was offering grant money to businesses that installed a green roof. Grants may still be available for new projects.

Although green roofs require a greater investment initially, there are several benefits to installing one.

- They extend the life of the waterproofing membrane by three to four times the average life, which will save in maintenance and replacement costs.
- Green roofs reduce the temperature of your roof in the summer. A roof can normally reach a temperature of 160 degrees, but with a green roof, the temperature is around 80 degrees. Heating and cooling costs are approximately 25% lower.
- Green roofs greatly reduce storm water runoff, though absorption, which will relieve the city’s sewer system, which is especially important in Lancaster City.
- Green roofs filter carbon dioxide out of the air and release oxygen, which helps to cool the city instead of making it hotter.

It’s been fascinating to watch the process and see the cuttings and how they have taken root, and are starting to grow. There will be some basic maintenance involved for about two years, including watering and eliminating weeds. We have had much interest from our local clients, wanting to take a “tour” of our new roof. It’s exciting to be close to this project and I hope that other businesses follow suit and realize that the benefits far outweigh the initial cost of a green roof.