

3 Rivers Wet Weather Spotlight on Regional Green Infrastructure

Allegheny County Office Building Green Roof

Where: 542 Forbes Avenue, Downtown Pittsburgh

When: Completed in June 2010

Here's the Story: Did you know there is a green roof atop the Allegheny County Office Building in downtown Pittsburgh? Built as an educational model to demonstrate the benefits of green roofs, it demonstrates four types of green roof technologies:



- 1. Intensive:** 8 to 12 inches of soil and growing shrubs and plants needing the soil depth
- 2. Semi-intensive:** 6 inches of soil and able to grow plants and shrubs
- 3. Roll out mat:** Set on 4 inches of soil, this pre-grown sedum mat provides instant cover
- 4. Tray system:** Easy to install, pre-grown sedum and lightweight

It became a lush oasis of green and flowers, after just one season of growth.

Demonstrating the benefits of a roof were the priority, so the project has significant monitoring in place. Allegheny County has 8 dataloggers collecting data from a network of 90 sensors located around the green roof and conventional "control" roof. The weather station monitors current conditions on the rooftop. The sensors monitor a range of green roof and conventional roof conditions such as temperature of the roof, soil moisture and water flow and water retention during wet weather events.



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