



CASE STUDY: Rainwater Harvesting System Helps Achieve LEED Platinum Status

The Challenge

The Bloomberg Center at Cornell Tech sought to attain net-zero energy efficiency and LEED Platinum status. As a result, the building had to generate all of its energy on campus and to use as little water as possible. HIGHMARK was approached by the Bloomberg Center to figure out the most effective way to maximize water use and conservation, thus enabling it to meet its ambitious efficiency and sustainability objectives.

Project Specifications

- **Technology:** Aquanomix rainwater harvesting system
- **Application:** Higher Education
- **Location:** Bloomberg Center at Cornell Tech
- **Project Type:** Mechanical, Electrical & Plumbing (MEP) and Engineering
- **Project Size:** 6-story, 200,000 ft² building with 40,000-gallon storage capacity
- **Year of Completion:** 2017



The Solution

For this project, HIGHMARK identified the Aquanomix rainwater harvesting system as the best technology for the job, and incorporated a 40,000-gallon rainwater harvesting tank under the campus lawn. Aquanomix is unique in the marketplace due to:

- **Rainwater Harvesting and Stormwater Control:** The customizable system has all necessary mechanical equipment, sensors, water treatment and controls for rainwater harvesting and intelligent stormwater control.
- **Pre-Engineered Treatment Skids:** Pre-engineered rainwater harvesting systems are designed to take the guesswork out of rainwater and gray water harvesting and reuse.
- **Supporting LEED:** Efficient building water management is essential in LEED, and Aquanomix is the most cost-effective way to secure rainwater harvesting points.
- **Meeting NYC DEP Requirements:** HIGHMARK's modular steel or fiberglass water tanks are the perfect solution for NYC DEP stormwater detention requirements.

The Results

By installing the Aquanomix rainwater harvesting system in the Bloomberg Center, the following results were achieved:

- **Maximized Water Conservation:** The rainwater harvesting system supplies 60% of the building's non-potable water demand, such as toilets and the cooling tower, and irrigates 96% of the campus's landscape.
- **10/10 in LEED Platinum Water Efficiency:** The Aquanomix system fulfilled all 10 points in LEED's water-efficiency category and helped the building achieve LEED Platinum.
- **Sustainability Goals Accomplished:** The rainwater harvesting system played a key role in enabling the Bloomberg Center to become one of the most sustainable buildings in the world.