

GREEN INFRASTRUCTURE AT ASCE HEADQUARTERS

A GREEN INFRASTRUCTURE SHOWCASE

Project Details

In November, the American Society of Civil Engineers (ASCE) transformed its Reston, Virginia, headquarters parking lot into a green infrastructure showcase, demonstrating how sustainable design can mitigate stormwater pollution. A key element of this renovation was the integration of FocalPoint, a high-performance bioretention system, chosen for its ability to efficiently manage large runoff volumes in limited space.

The project replaced 6,000 ft² of impervious asphalt with permeable pavers, allowing rainwater to filter through and recharge groundwater. Near the building entrance, ASCE installed biofiltration systems, including bioswales, green walls, and porous concrete walkways, to enhance both water and air quality. However, FocalPoint played a crucial role in ensuring the system's overall efficiency, offering a compact yet highly effective solution for managing stormwater on-site.



FocalPoint's advanced design sets it apart from traditional bioretention systems. With an infiltration rate of 100 inches per hour, far exceeding typical bioretention soil mixes, it rapidly processes runoff, minimizing required footprint while maintaining peak performance with minimal maintenance. Its modular nature allows seamless integration with other Low Impact Development (LID) strategies, such as bioswales and stormwater planters, making it ideal for both urban and rural applications.

ASCE's implementation of FocalPoint underscores its commitment to sustainable engineering while demonstrating how high-performance bioretention can address stormwater challenges without sacrificing valuable space. Informational signage throughout the site educates visitors, including engineers, educators, and policymakers, on the system's benefits, reinforcing the importance of innovative stormwater solutions.

Parking Lots as Green Infrastructure

Traditional parking lots contribute significantly to stormwater pollution, but ASCE's redesign highlights how strategic green infrastructure can turn these spaces into environmental assets. The success of this project aligns with broader Chesapeake Bay restoration efforts, where organizations like the Water Environment Federation (WEF) and the EPA have pioneered similar initiatives. From modular rain tanks in Lancaster, Pennsylvania, to suspended green roof trays in Washington, D.C., parking lots are increasingly being repurposed to manage runoff effectively.

By incorporating cutting-edge solutions like FocalPoint, ASCE's headquarters serves as a model for sustainable stormwater management, proving that even high-traffic, functional spaces can enhance environmental resilience while meeting regulatory demands.



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