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New Denver EPA Building Topped Off With Green Roof

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Opening Just in time for GreenBuild Conference

Chicago, IL — Denver, CO, like many other American cities, is working hard to become environmentally responsible.

The city's mayor, John Hickenlooper, has announced an extensive sustainability initiative dubbed "GreenPrint," which is an ambitious plan to convert city vehicles to hybrids, reduce energy use in city buildings, and build solar and methane power plants by 2007.

So it is not surprising that Denver's new 232,000-square-foot U. S. Environmental Protection Agency building, which opens in a few months, will be a welcome addition to the city and one of the Greenest facilities in Denver and the country.

Constructed with an eye toward resource and energy efficiency, the building aims to earn Gold certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating System.

Environmentally and energy preferable building products and materials were used throughout as were photovoltaic arrays and wind turbines to generate electricity. And on the top of the building a Green roof.

"The architects and developers wanted a Green roof for several reasons," says Sandra McCullough, with Weston Solutions, Inc. (WESTON") that installed the roof. "One of the main reasons is that Denver has strict stormwater runoff guidelines, and a Green roof helps reduce runoff considerably."

McCullough says that the architects and developers also wanted a Green roof because it helps reduce energy costs and can contribute to as many as seven points toward LEED certification.

Why Modular?

The Green roof installed is an extensive Green roof with low-growing vegetation such as sedum, grasses, and other hearty, drought-resistant plants installed in four or five inches of growth media (soil). However, they had to choose between a built-in-place system (where soil is placed right on the roof and plants are put in, as in a traditional garden) or a modular system.

With a modular system, vegetation and growth media are preplanted in modules made of 60 percent recycled plastic. The modules, which come in varying sizes, are then placed on the existing roof, one after another.

"They selected the GreenGrid modular system because it is cost effective," says McCullough. "Also, the modules can be picked up if the roof's photovoltaic panels or other mechanicals need servicing and then replaced when repairs are completed. You can't do that with a built-in-place system."

In addition, because the modules can be pre-grown at the nursery, they can be delivered to the jobsite when needed. This also allows the plants an opportunity to grow out in their installed state.

McCullough adds that the Green roof will be included in a Green tour of Denver scheduled for the upcoming GreenBuild Conference, which will take place in Denver on November 15 through 17, 2006.

SOURCE: Weston Solutions, Inc.

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