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Architectural PRODUCTS

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trendlines › roofing systems

REPAIR RESTORE RECOVER OR REPLACE

roofing methods:
One of the most expensive decisions an owner or facility manager will have to make over their building's lifespan remains out of sight of most occupants and passersby. The question is whether to patch, recover or replace an aging roof.

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Going Green

A fascinating re-roofing option is also exploring a transition to a vegetated roof—at least if you have the right membrane. According to Dennis Yanez, national marketing manager with American Hydrotech, they're seeing clients, who don't necessarily have the budget for a vegetated roof, plan for the future by installing a "Veg Ready" system. If the client has a hot rubberized asphalt membrane, vegetated roofs can be retrofitted with not as much difficulty as one would expect.

This was the case recently, with the city of Bellevue, Wash. Back in 2002, the city acquired an existing office building to consolidate departments. Two years later, under the guidance of architectural firm SRG Partnership, the city began extensive modifications, including seismic upgrades. As part of the retrofit, beyond a new façade and HVAC system, a new gravel ballast-covered roof with Hydrotech's MM6125 waterproof materials, was installed—all with a forward-looking intention of later removing the ballast and installing a garden roof. In fact, the city council applied for a grant to later execute the plan. In Aug. 2015, the city received a $90,000 grant, and proceeded with plans to begin the retrofit. Weather and water tests determined that beyond the aesthetic benefits, the upgrade to a vegetative roof would slow down and filter rainwater that would otherwise flow directly into the storm drains. The studies also concluded the new roof would reduce heating and cooling costs.

"We're starting to see this happen with schools all the time now," notes Yanez. "It just gives owners options to one day make the roof more amenable. Another big trend with roofs is to consider "blue roofs"—but that's a story for another day. The good news, it will be next issue.

Studies have shown that green roofs can also reduce heating and cooling costs, exemplifying just another advantage to think about when considering a green roof design.

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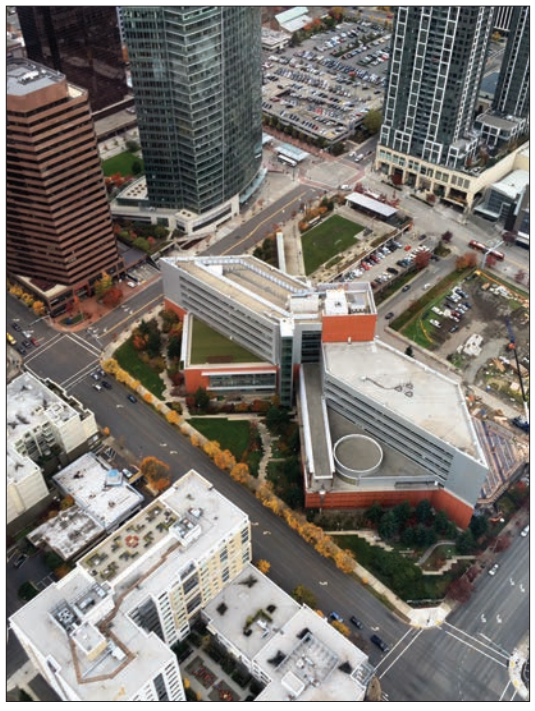
GRAVEL TO ... . GREEN ROOFS



GREEN PIONEER
Washington State has always been considered a pioneer when it comes to the adoption of greener and more sustainable practices. One of the most sustainable practices is to reuse an already constructed building and enhance that building from within to bring it up to today's green standards. In 2002, the city of Bellevue, Wash., sought to consolidate all functions under one roof; however, doing so would require additional space as it had outgrown its existing City Hall structure. The city decided to save $50 million on new construction costs and purchase an existing 227,000-sq.-ft. office building at 450 110th Ave., formerly occupied by Qwest. In 2004, architectural firm SRG Partnership began modifying the concrete structure, including seismic upgrades; also added were a new facade, a heating plant and enhanced power distribution. Teams installed a gravel ballast-covered roof with American Hydrotech's MM6125 waterproof materials.

A GARDEN GROWS
In Aug. 2015, with the aid of a grant, and after performing a number of weather and water tests in partnership with American Hydrotech, architects and contractors, the city council and facility managers determined it was time to update from a ballasted roof to a vegetative roof. Not only would a green roof slow down and filter rainwater that would otherwise flow directly into the storm drains, but it would also reduce heating and cooling costs. Given the flexibility of the roof components for future enhancements, contractors were able to quickly remove the gravel ballast, styrofoam and other materials, and replace them with new insulation and the garden roof assembly.