

Walkabout: Up on a roof, it's getting greener: the YWCA project

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By Diana Nelson Jones, Pittsburgh Post-Gazette



Diana Nelson Jones/Post-Gazette

A crew installs pallets of sedum on the roof of the Downtown YWCA.

The first four floors of the YWCA Downtown ended up being the only ones, but the Y was built in 1964 to support 10 additional stories. Two years ago, when administrators decided it was time to replace the leaky flat black roof, they went after a much bigger solution.

Today and tomorrow, workers from the Allegheny Construction Group are laying the last pallets in a 4,900 square-foot patchwork quilt of sedum to complete a 64-ton green roof on the building at Wood Street and Fourth Avenue.

It is part of a \$1.1 million roof and exterior restoration project. Roughly half the money came from the federal stimulus, the rest from five local foundations and the YWCA.

The new roof materials include a Firestone rubber membrane over 4 inches of insulation. It feels as if you're walking on an air mattress as you maneuver the pathways through these fields of sedum. They come in 2-foot-by-2-foot pallets that connect to each other roughly the way you close a cereal box by fitting the tab into the slit. The effect looks almost seamless if you're standing several yards away.

It's a nubby green carpet, a gift to the people looking down from upper stories in the Carlyle or the Arrott Building.

As the crew lifted pallets from a wheelbarrow and fit them into their spaces the other day, green slowly began to fill the foreground. I studied the Arrott, one of the city's most beautiful buildings. From where I stood, it was right up against the Y, whose parapet was the only thing between the Arrott and the green carpet. The Arrott looked even more beautiful.

The difference between the emotional impact of a flat black roof and a carpet of green sedum is the difference between feeling forlorn and feeling comforted.

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This city is awash in flat black roofs. If every one of them that could support the weight were covered in pallets of sedum, the storm sewer system would be relieved of a lot of run-off.

"This is more than a solution to a roof problem," said Dan Lipinski, the project superintendent for the Allegheny Construction Group, the general contractor. "It will slow the rate of drainage and release Co2 back into the atmosphere.

"The old roof would have an inch or so of water standing" after a storm, he said. Now when it rains, the planting medium, which is formulated for the maximum retention, will release it slowly through little seep holes in the bottom of the pallet. The Firestone membrane is guaranteed to last 30 years, and that's without the sedum.

Only the water that hits the pathways will drain into the storm sewer system.

An estimated 25 green roofs are serving that greater good throughout the city. They include portions of the county office building, the Heinz 57 Center, Fifth Avenue Place and the David Lawrence Convention Center.

"We've been recycling and trying to take steps to become a green building," said Jack Wolf, the Y's building services director. "This is a step in the right direction."

The project's architect Max Mavrovic said his firm was called originally to design exterior renovations to replace stucco that water had infiltrated.

"They wanted a solution to their roof, too," he said. "We've been working on this for a couple of years." He said he has had a few inquiries from other people considering green roofs.

Rofer John Nagoda of the R.J. Meyer Co. said the YWCA is "a perfect building to do this on," in part because the roof could handle the weight. In addition, he said, "dollars are ensured" in energy savings.

How many dollars over a particular time span is hard to tell, said Maggie Jensen, the Y's CEO. The double-paned windows that were part of the exterior renovation will help, she said, "and the green roof will insulate the building," making it naturally cooler in summer and hold heat in winter.

"We wanted to be a good community neighbor," she said. "We wanted to be part of the green corridor that Pittsburgh is known for. We wanted to add to it."

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