

Green Roof, Cleveland State University, 2420 Chester Avenue, Cleveland, Ohio



The east roof of Cleveland State University's LEED-certified Recreation Center is home to a 7,000 square foot roof top garden, which consists of 10 different species of sedum (15,000 plants), filter fabric liner, and permeable paving bricks. Although the Recreation Center east roof top was built to house a green roof, due to budgetary constraints, the garden was not installed during construction of the building.

Due to the efforts of two environmental science students from Cleveland State, enough support and funding was raised in order to undertake and complete the project. The students raised a portion of the funding with additional support provided through a local foundation and the University's administration. The total cost of the project was estimated at \$224,000: \$20,000 for landscape design; \$150,000 for materials; and \$54,000 for the general conditions, overhead, profit, and project contingency. The project installation was completed with the help of 20 volunteers in August 2009.

According to environmental science graduate LeeAnn Westfall, the green roof system will extend the life of the roof by 30 or 40 years by protecting it from wear and tear from weather. Green roofs have other benefits such as reduced heating and cooling costs by keeping cold in during the winter and warm air in during the summer, reduced storm water runoff through plant absorption, cleaner storm water through plant and fabric filtration, and improved air quality by reducing carbon in the air.

Although no data is available yet, the university plans to begin monitoring and documenting energy savings in 2012.

A video is available at <http://www.csuohio.edu/committees/sustainability/initiatives/current3.html>

Sources:

Kramer, D. August 6, 2009. Two women bring \$250,000 rooftop garden to life atop CSU's Recreation Center. Retrieved from http://blog.cleveland.com/metro/2009/08/two_women_bring_250000_rooftop.html

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<http://www.csuohio.edu/offices/advancement/news/rooftopgarden.html>

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www.csuohio.edu/offices/architect/projects/lf-0821.pdf

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<http://www.csuohio.edu/services/recreationcenter/recreationcenterfacts/facilityrentals/RentalDescriptions/greenRoofTop.html>

<http://www.csuohio.edu/class/com/clevelandstater/Archives/Vol%2012/Issue%201/Copy/120112.html>