



Green roofs: The new sustainability asset

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Take a sky view look at New York City's rooftops and it's a tar and asphalt jungle. But, little by little, change is coming, turning ugly roofs into environmentally sound solutions that also increase the beauty, marketability and "health" of a property. As a commercial real estate appraiser who monitors green developments, I foresee green roofs as an up and coming trend.

The benefits are numerous and compelling.

First is mitigation of the Urban Heat Island Effect. Heat islands are built up areas that are hotter than nearby rural areas. New York City is a vast heat island with negative impact on energy, water and health. Serving as building insulators, green roofs reduce energy, air conditioning and heat usage as well as air pollution and greenhouse gasses.

Green roofs also help control storm water runoff via vegetation absorbing water that, as runoff, contains pollution and contaminants. According to NYC Environmental Protection, "Storm water can pose challenges to the city in the form of combined sewer overflows and flooding" during heavy rain or snowstorms.

Green roofs can extend roof life, reduce A/C and heating costs, serve as a storm water management tool and fire retardant, reduce noise, contribute to air quality and enhance a property's marketability by transforming dead, ugly space into usable garden space.

So why has green roofing been slow to take hold? It's an expensive and extensive undertaking with many complexities ranging from a building's load capacity; usage (will it only be viewed or be usable garden space?); what part of the roof you will green (north, south, east and west exposures vary greatly); whether you install an intensive green roof (which is thicker, deeper, heavier, supports more plants but requires more maintenance) or extensive (shallower, lighter, more minimal maintenance); what plantings will be included; and what systems will be built for root barrier, drainage and irrigation.

You'll need a P.E. and registered architect to do a structural analysis to determine if your roof can sustain vegetation or needs reinforcement; specialists to design and install the system; and a big budget.

Legislation renewing the green roof tax abatement program was extended to March 2018 for tax years beginning this July 1 and ending June 30, 2019. The abatement amount increased from \$4.50 to \$5.23 per s/f of a green roof.

Too numerous to cite here, there is a vast amount of information on the Internet. Surf "green roofs" and go!

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