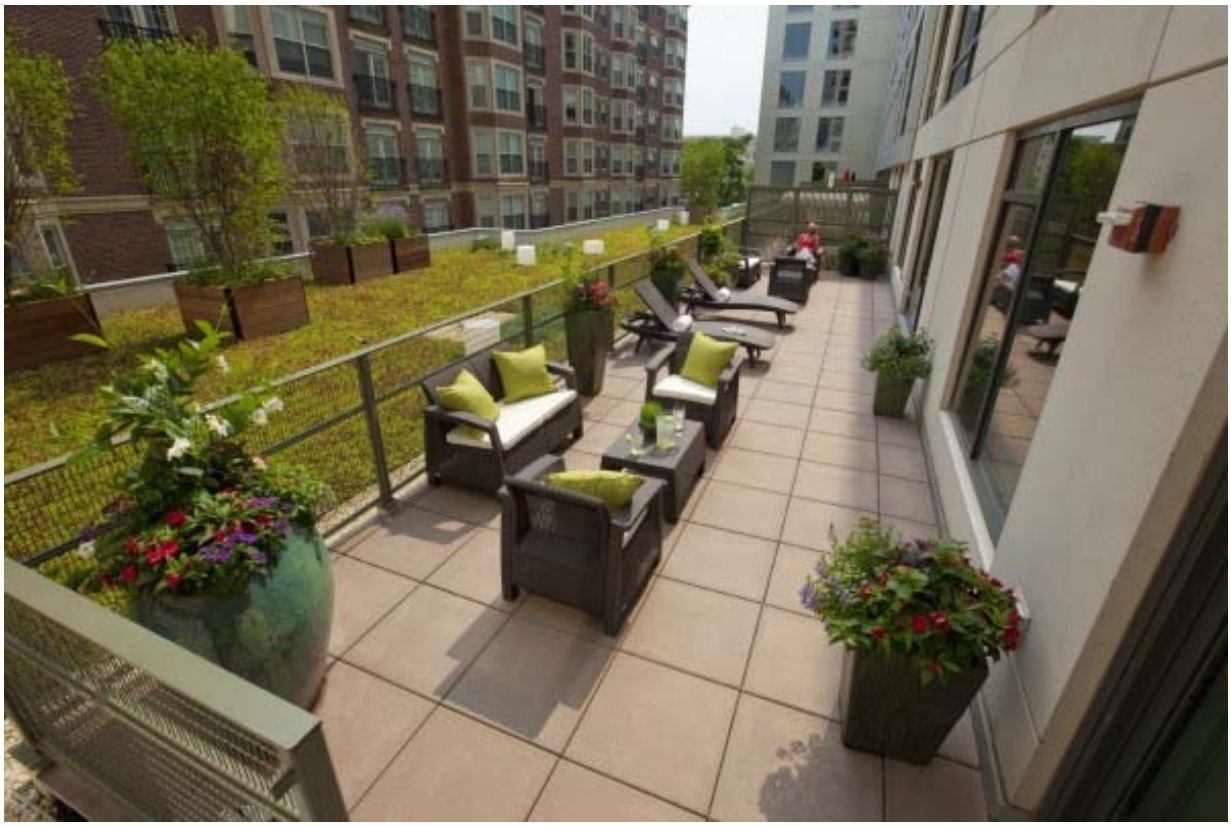
Green Roof Installation Raises Value of Boston Apartment by $2.4 Million



By Tim Blackwell | Dec 28, 2012

The Green Monster recently got a new green neighbor.

A green roof installation is now within throwing distance of the iconic left field wall at Fenway Park on Yawkey Way. While some residents of the 1330 Boylston Street apartment community can't see the action on the field, they do have a nice view of the

environmentally friendly roof installed during the summer on the 4-year-old property owned by a partnership of Samuels & Associates and institutional clients advised by J.P. Morgan Asset Management.

The installation has proved to be a win-win for property managers, owners, and residents, as well as the environment. The installation, which cost $112,500, is generating an additional $300-$500 per month in revenue for about 25 units that overlook what used to be a heat reflective, stark, white roof typical of building construction four years ago.

The green roof held the attention of the audience during a sustainability session in November at the National Multi Housing Council's OpTech 2012 conference. Green roofs are becoming more common among apartment property owners and developers wishing to reduce energy costs and better manage environmental concerns like excessive storm water drainage.

An Apartment with a View and Lower Energy Costs

While residents can't go on the roof on 1330 Boylston Street, they can see lush vegetation and potted trees from windows and balconies, and the Green Roof Observation Deck off the property's club room while enjoying lower energy costs. Nick Recupero of Samuels & Associates, a development and management firm that manages the property, said residents have commented to property staff that their electric bills have been lowered since the installation.

"You now see residents have their blinds open," Recupero said. "They are enjoying the aesthetic view. The air-conditioning pumps are running less. The temperature in their apartments is lower because you're not getting the heat reflection off the white roof. You can see usage of pump and you can see they are used less frequently."

The vegetation on green roofs reduces the amount of energy needed to moderate temperatures of the building and decreases heat islands typical in urban areas. Green roofs also soak up rain water that would otherwise be dumped into drainage systems that empty into – and sometimes pollute – rivers, streams, lakes, and bays.

Creating a Green Roof System One Layer at a Time

The green roof at 1330 Boylston Street, made from sedum, took about two months to complete from start to finish, including design. Sedum is a hardy plant product that changes color and grows only to about 4 inches tall at maturity. Sedum is maintenance free, requires no irrigation, and takes about a month to fill in. After that, it essentially feeds itself, Recupero said.

As for the rest of the roof, only the four trees planted in 4' x 4' boxes will require occasional trimming and pruning.

"It's a very hardy system," said Recupero, who says the materials have a 20-year warranty. "It's drought resistant. In the summer time it's green and has colorful flowers. In the fall it turns purplish-red."

Think of a layered dip and you'll get the idea how the green roof system came together at 1330 Boylston Street.

The Sedum plant.

Drainage, slope, and weight of the roof were first taken into consideration. Once the actual construction began, a moisture-resistant closed cell polystyrene layer and root barrier membrane was installed first to keeps roots from penetrating the roof, which is essential to prevent damage that could be costly. Next, an egg-crate filtration system was applied, followed by engineered soil, sedum beds, and other plant material.

Decorative and sculptural solar lights and a battery-operated irrigation system topped off the roof.

A Short-Term Investment with Lasting Property Value Improvements

The property proved to be a perfect choice to apply green technology, Recupero said.

Because roofs today are built much sturdier than those decades ago, the project didn't require any re-engineering to handle the extra weight that goes with installing green roofs. Extensive engineering work to support the roof would have likely made the project cost prohibitive.

The roof has been a hit for residents and the apartment property. Don Rederscheid from J.P. Morgan Asset Management said as leases came due for units that overlooked the green roof, residents willingly paid higher renewals. Once renewals for the units are complete, the property expects to generate about $120,000 in additional revenue annually for the virtually maintenance-free roof. At a 5-percent cap rate, **J.P. Morgan Asset Management estimates the green roof has improved the value of the property by $2.4 million**.

The keepers of the Green Monster probably can't say that. Unlike the lifeless, tall, green wall, the green roof top at 1330 Boylston Street has become a living, breathing amenity that's added significant value. It's doubtful that it will be going, going, gone for quite some time.

Are you considering installing green roofs at any of your apartment communities? What obstacles are you encountering? Share your stories in the comments below.

Images courtesy of brian urkevic.