



HOME **BLOG** FAQ ABOUT CONTACT

MY ACCOUNT VIEW CART

The Blog



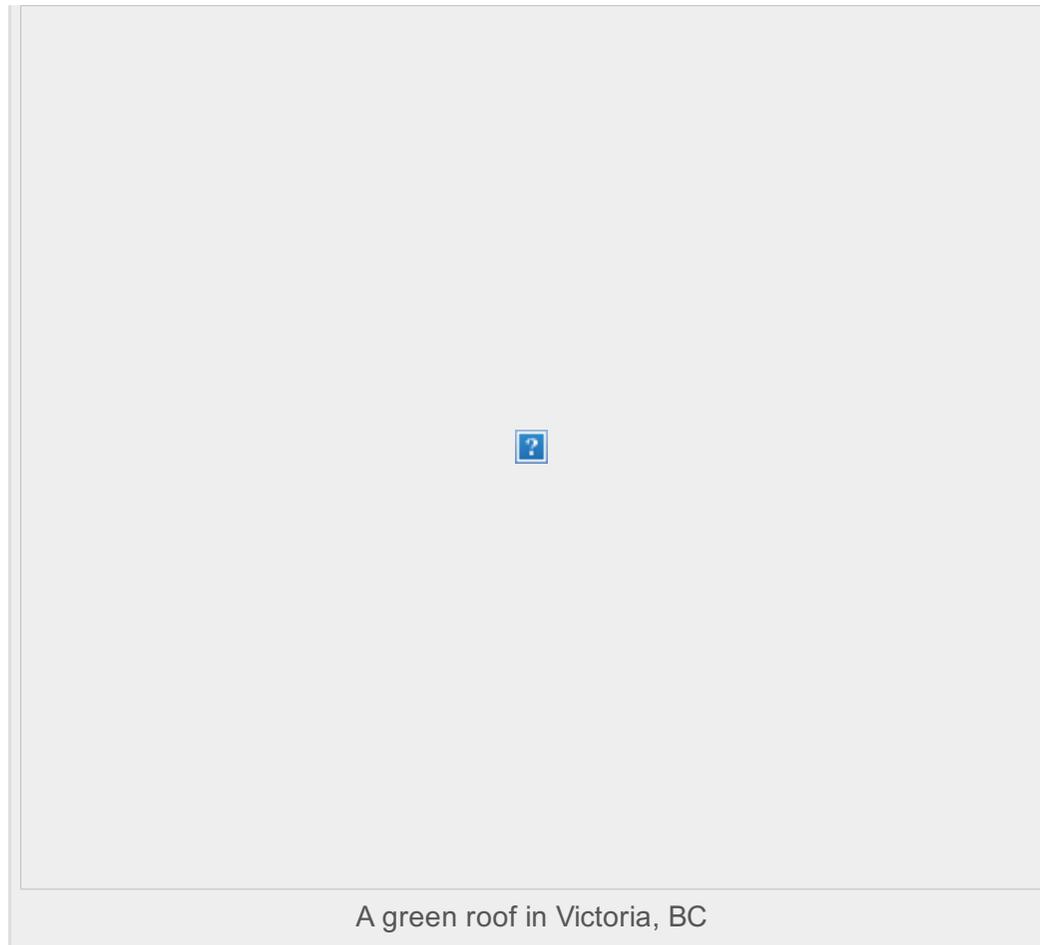
Green Roofs: Energy Efficiency for Winter Homes? Yes!

Posted on 17. Oct, 2011 by [Maryruth Belsey Priebe](#) in [Articles](#)

OUR MOST POPULAR ARTICLES

[Should Old Buildings be Sacrificed to Construct](#)

0
Like
0
Share



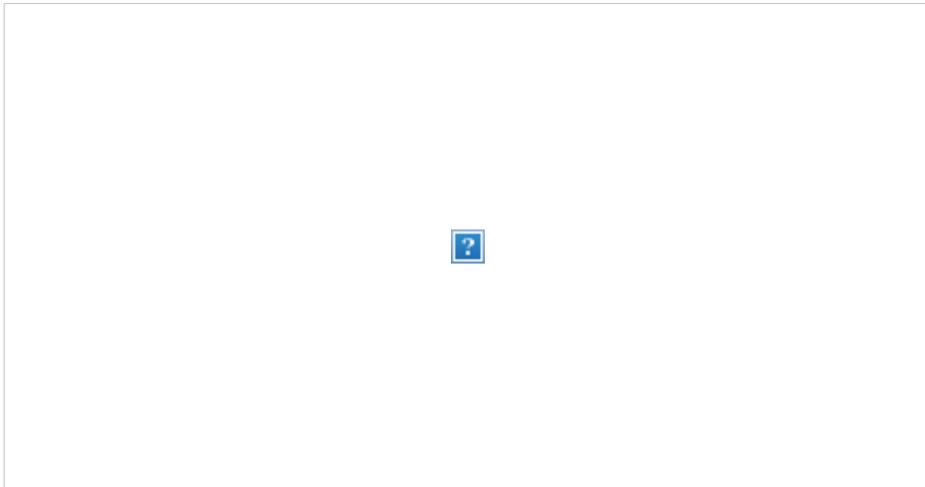
When you think green roofs, do you think summertime savings? Lower cooling costs are generally what people associate with green roofs, but did you know that the insulating qualities of green roofs are also great for winter homes? It's true, adding a green roof to your [green house plans](#)—whether you live in a single family home or a multi-family dwelling—will likely have a positive impact on your heating bills.

A study done at the [University of Toronto](#) analyzed a test roof built in Ottawa that offered the first ever study into whether a green roof could improve the efficiency of the home in winter. Using two winter green roof models (consisting primarily of Juniper shrubs), and contrasting them against a conventional asphalt roof, simulations were tested in January and February. Though the vegetation reduced the conservation of heat by shading the roof, the scientists found that the green roof would increase conservation of heat by reducing wind speeds and modifying the

microclimate above the roof.

We know that green roofs can reduce cooling bills by up to [75% compared to conventional roofing](#), but here's what the scientists found out about green roofs in the winter:

- A home built with asphalt roofing required on average 7,748 kWh of heating energy compared to only 7,287 kWh of heating energy for the test home with a winter green roof.
- The potential heating energy savings were estimated to be between 5.63% and 5.95%, with savings up to 61% for upper-level floors.



There are many types of green roofs—those made with shallow soil bases and low-growing plants for sloped roofs and those with deep soil bases with tall trees, vegetable gardens, and more, to name a few—so the winter benefits of a green roof would greatly depend on its design. But the study was a huge factor in getting the City of Toronto on board with green roofs—they developed a [Green Roofs for Healthy Cities](#) initiative that's having fantastic benefits for the city.

There are many more advantages to having a green roof on your home—too many to go into today—making it a feature you should definitely consider when making your [green house plans](#).

Images Via Flickr [pnwra](#) and [GreenRoofs.org](#)



Related posts:

1. [Should Old Buildings be Sacrificed to Construct Green Buildings for Energy Efficiency?](#)

 Tags: [energy efficiency](#), [green house plans](#), [green roofs](#), [heating](#)

We were unable to load Disqus. If you are a member,



About YellowBlue Designs

We blog about green building practices to help you create energy efficient homes.

© 2015 YellowBlue Designs: [Privacy Policy](#) | [Terms of Service](#)