

GARDENS Four Seasons

GARDENDESIGN
- Jan/Feb/March 2025 -

**What in the World is a
GREEN ROOF?**



redit: Waterproof Mag

*“If we steal the ground for a building,
we can give it back to nature on the roof” - Wolfgang Ansel*

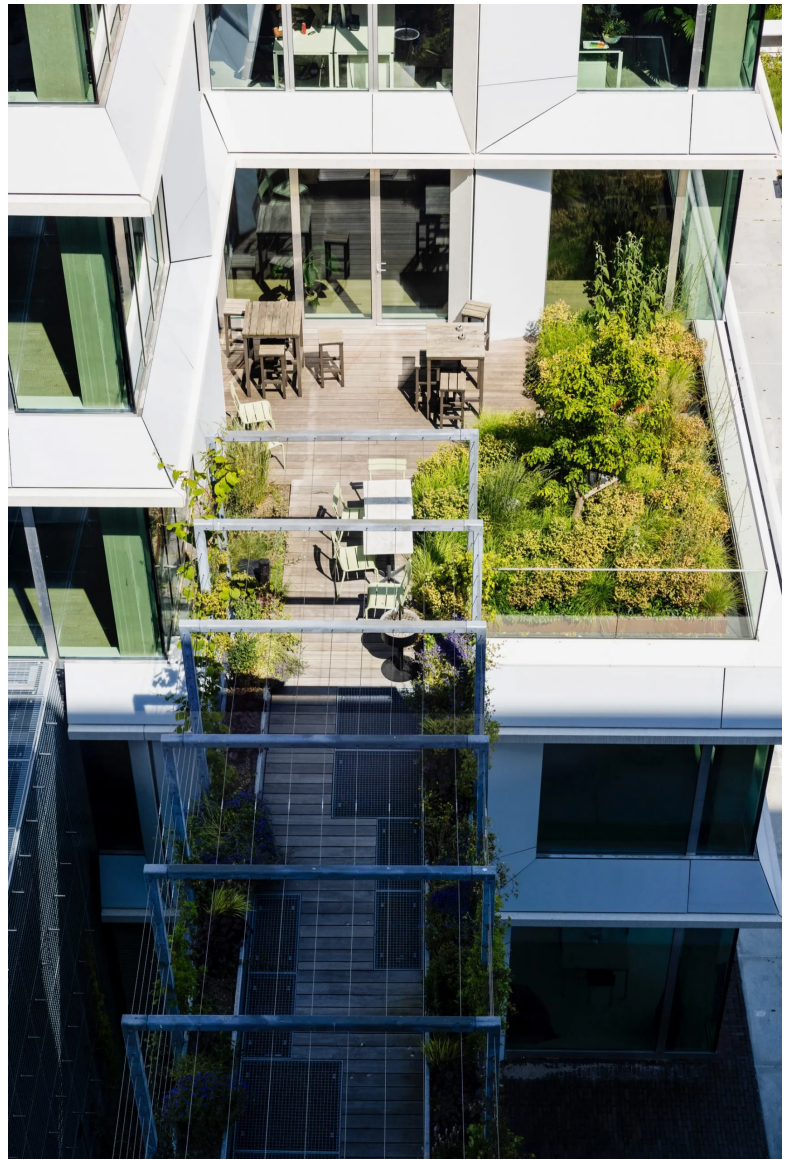
(thank you for stating a brilliant solution to *ground theft* Wolfgang!)

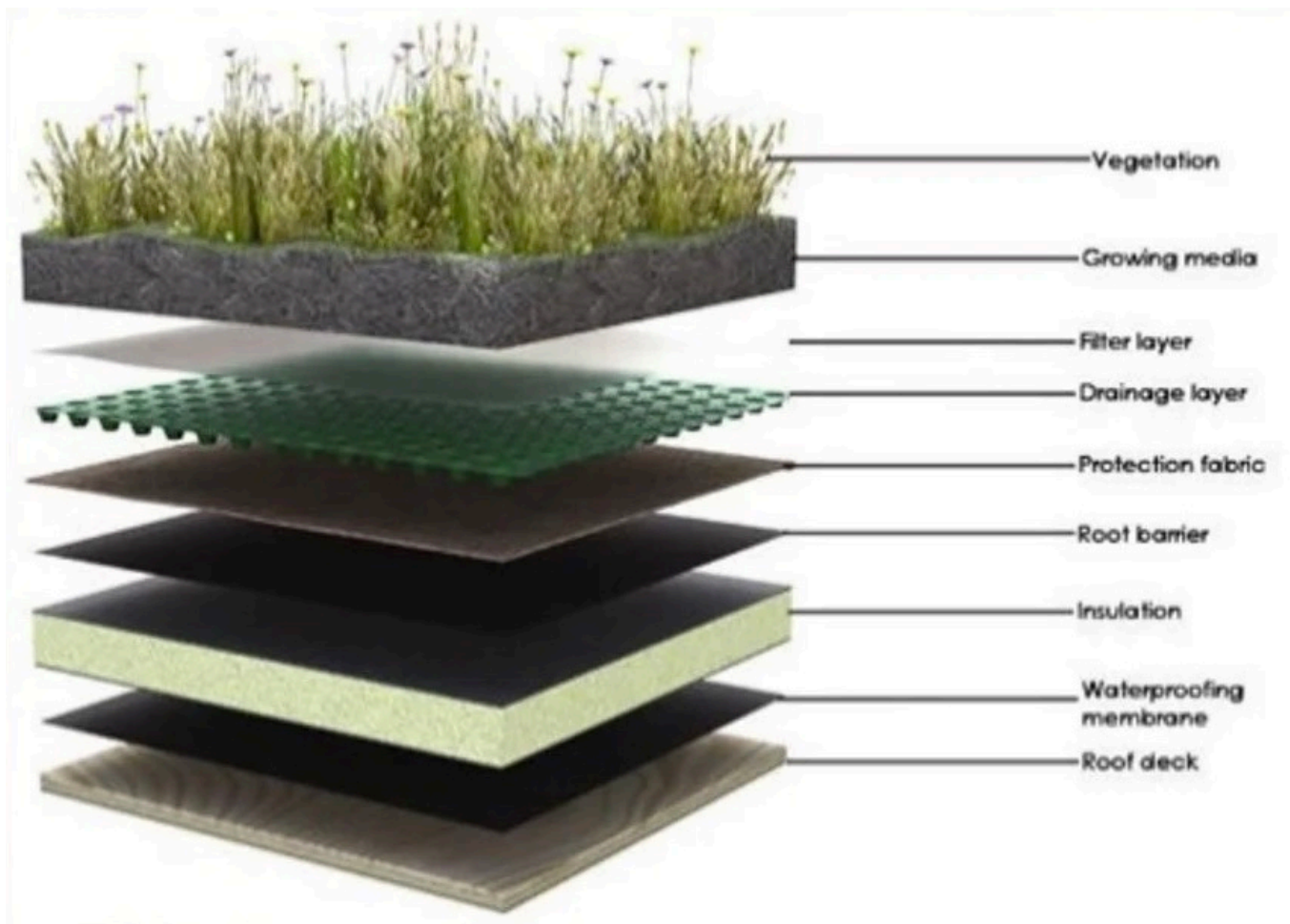
What in the World is a Green roof?

You might think it is potted plants on a roof top or a covering of artificial turf - but - you'd be wrong!

A Green Roof actually becomes a waterproof part of a building's roof - live plants grow & thrive in a substrate to create an incredible living feature where one would least expect it! They are also known as Vegetative, Living or Eco roofs & can cover all or just a portion of the top of a structure. They create the perfect opportunity for all sorts of hardy perennials, shrubs & small trees because the soil levels will vary on each.

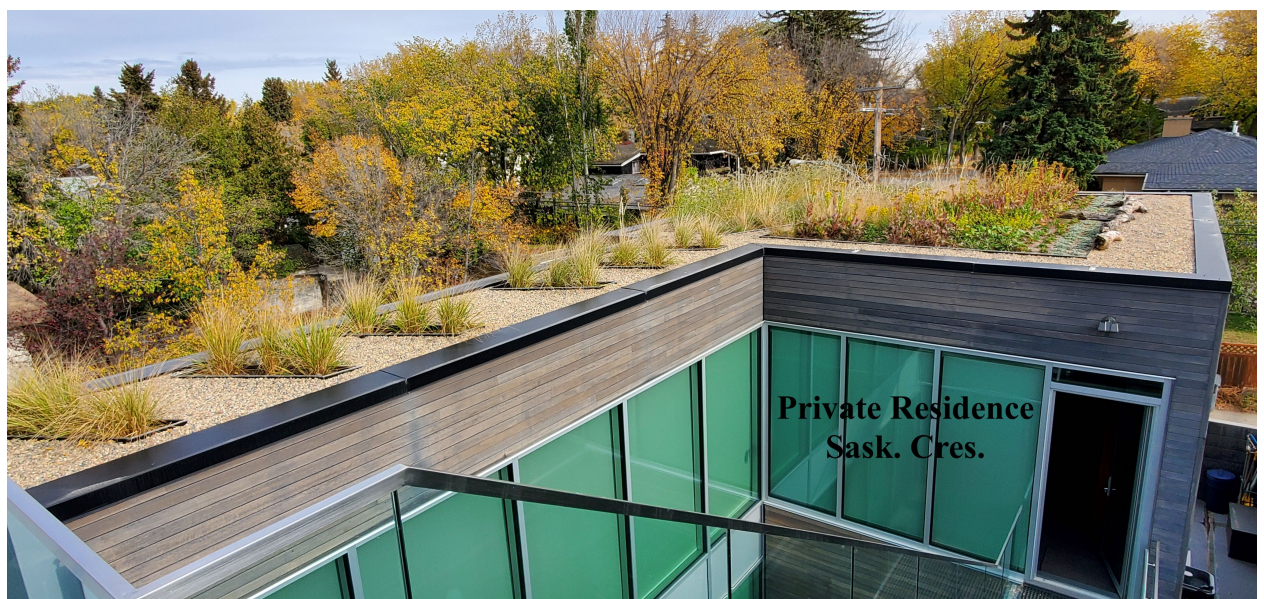
Long before the plants & custom substrate are set in place however - a number of layers are installed to waterproof, insulate, filter, drain & possibly deter root growth.





& wa-a-ay before that, the structure is inspected by an engineer to ensure it can take the extra weight load. A well thought out plan is drawn up that includes a maintenance schedule (yup, tho' most green roofs are fairly low upkeep - like everything else - regular care is crucial.)

Green Roof landscapes provide *peaceful, idyllic outdoor places* & physical & psychological health boosts have been well documented. The *significant assets* are *environmental, social & financial!* (I think of *stunning rooftop patios!*)



Credit: Higher Groundwork HortiCulture

Their *calming presence* belies their numerous other benefits. Aside from having something *truly fun, unique & downright beautiful* on a property there are Numerous Benefits:

Real Estate Values are boosted & not just for the properties on which they end up. The value of nearby properties which share the spectacular view also goes up.



Credit: Sweden-Constructive Voices

Each situation is different, nevertheless energy efficiency is greatly improved because the extra layers add insulation - which in turn escalates a building's ability to remain cooler during warm months & prevent some of those cold temps (brr-r-r!) from infiltrating the structure's inside.

They make sense in not only warm climates but all the way to Scandinavian countries & in fact Greenland!

They are perfect for commercial & residential properties or even



garage or shed roofs! Plus it is proven fact they easily become *home to an amazing array of birds, insects & native plants plus even a goat or 2....bonus!*



Green Roofs make **very good use of rain & storm water.** While the moisture is excellent for the plants, the soil & the plants themselves filter air pollution & other contaminants thus enriching air quality. (Think of a '**carbon sink**' effect.) Moisture flow is slowed substantially making it easier for our aging municipal storm drains to handle the excess run off. It additionally becomes a great bio-filtration tool so **less contaminated water reaches our rivers!**



Situated on commercial or residential structures, they are equally at home on garden sheds, trash bin storage roofs or even a bicycle rack!

Looking to obtain **LEEDS** certification for a building?
(*Leadership in Energy & Environmental Design*) This feature
definitely adds to the points required!

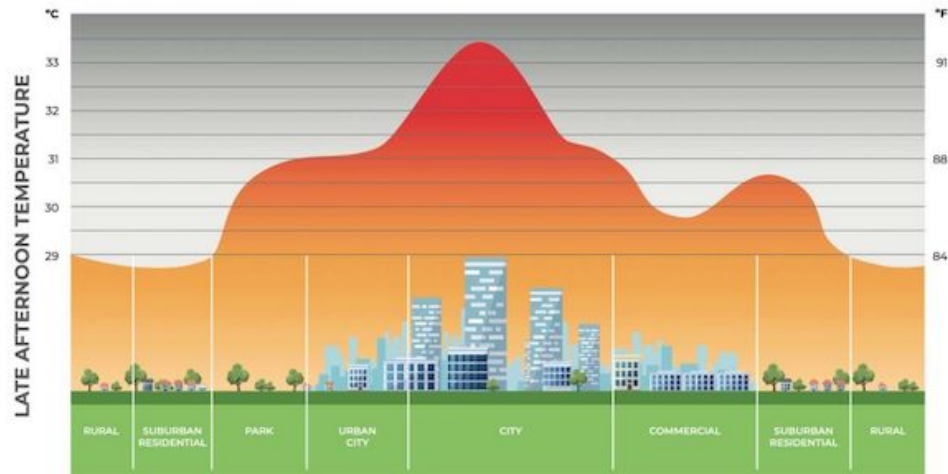


Further Green Roofs Benefits include:

- They act as **Noise Buffers**
- **HVAC system operating costs are lowered** because the green surfaces provide lower temperatures. (Green Roofs actually become part of the building's cooling system!)
- **Jobs** are created all the way from concept to completion to continued maintenance.

- **The ‘Heat Island’ effect is Reduced** (so common in downtown cores & cities in general where there is less vegetation & much more hard surfacing) Green roofs lower the ambient temps thus creating cooler patches.

Urban Heat Island diagram:



- **Opportunities for Social Space & Urban Agriculture** can also be readily generated. Imagine munching on a freshly dug carrot as you commune with nature & neighbours atop a roof!



- **Solar Panels** can be easily incorporated....a double **whammy!**



- Fast forward into the future - one of *the* best reasons for installing a GREEN ROOF - it greatly **increases the life span of any roof** - lasting as much as 2-3 times longer than any conventional roof. This translates into another major eco-friendly perk - since the roof is replaced far less often, much **more waste is diverted from dumps!**



I have been an Accredited Green Roof Professional for over 2 years & have been involved in a few actual installations thanks to my colleague Michael Molaro. Michael has the same accreditation & has successfully operated his green roof business Higher Groundwork HortiCulture since 2014 & has, in fact, been involved in most of the Green Roofs in Saskatoon & area including his own home!



Credit: Julie Barnes/CBC

I know you can tell....We are *passionate* about Green Roofs & are *excited* to answer any questions or perhaps meet with you to discuss the many possibilities!

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If you'd like to read more about Green Roofs in Canada - check out this article:

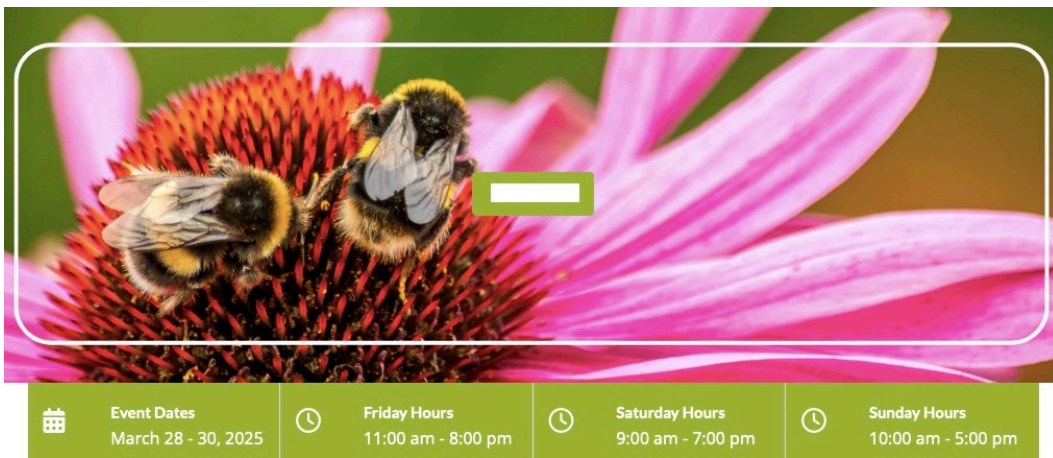
<https://www.nationalobserver.com/2023/12/19/explainer/green-roofs-reap-climate-benefits-how-do-you-build-one>



- May 2024 I had the privilege of helping a marvellous group of volunteers who installed a green roof on the garden shed at the Riversdale Community Garden - fun & productive & extremely useful!

EVENTS

March 28, 29 & 30, 2025 brings us the yearly Spring event -
GARDENSCAPE - taking place at Prairieland.



I'll be at the SOS TREES
booth on Friday afternoon 1:30 - 4pm
to answer questions on TREES!

If you don't catch me, please stop by
the SOS TREES booth & learn about our
Urban Forest to your heart's content!



PLANT OF THE MOMENT

SEDUM

Sedum - the lowly plant that prospers in dry, droughty sunny spots. You may also know them as 'Stonecrop'. Because of its' minimal root system it is one of *the* best plants to use on a Green Roof! (You probably guessed there was a tie-in to this issue's topic :)



Hardiness zone is 2b so it weathers beautifully in our prairie winters. Heights are pretty consistent with this ground cover variety - the leaves get to 1"- 2" & then the flowers add another couple of inches.



The blossoms put on a great show for 2-3 weeks so for that reason I like to cultivate not only the solid green leaf types but the many variegated ones in addition to the 'Acres' Sedum (below) which has foliage that is much more delicate.



Always remember, drought tolerant perennials such as SEDUM require a full season's growth before they are 'truly' tolerant to drought!



My next publication of GARDENDESIGN takes a look at another type of green surfacing - GREEN WALLS - indoors & out - it'll appear in your inbox come April/May/June 2025!



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