

kitchen garden design

HIGH IDEALS

Reach for the sky with a green-roof raised bed of edible and ornamental plants

DESIGNS AND TEXT BY SENGA LINDSAY



kept the roof loads in check and allowed good accessibility around the beds. Here we now grow Swiss chard, watermelon, iceberg and assorted leaf lettuce, vine and cherry tomatoes, zucchini, cucumbers, peppers and ever-bearing strawberries. Two honeybee hives were added to encourage pollination while keeping the 90 thousand bees at a respectful distance from neighbours.

Note that the plan below illustrates the guardrails required for an edible rooftop garden – and do check your own municipality’s regulations on this.

ADVANTAGES OF A ROOFTOP GARDEN FOR EDIBLES

- A controlled and sanitary environment that means fewer disease and pest issues.
- Less chance of marauders (i.e., rabbits, racoons, deer and bears) raiding the garden.
- Freeing up valuable limited outdoor real estate by moving edible gardens to the unused roof.
- Significantly fewer weeds than at garden grade.

No ground to grow your edibles? Think up... way up – and onto your rooftop! With less than a foot of soil you can grow most of your vegetables, herbs and even some fruits on your roof.

My husband and I created our own rooftop edible garden on top of an existing two-car garage that we structurally reinforced. Raised planters of custom sizes

BEFORE YOU BEGIN

The first step is to evaluate your roof’s load capacity. This is the amount of weight your roof structure can support and includes everything: planter boxes, soil (when wet), possible water storage, weight of crops at maturity, equipment and such temporary loads as people and snow. Working with a structural engineer is a must!

Review your municipality’s regulations. Architect or building designers can often assist you in interpreting building-code requirements for green roofs.

Consider sun and wind exposure. Edible plants require a minimum of six hours of sunshine, with heliophilous plants such as tomatoes needing at least 10. Study your patterns and hours of sunlight and note adjacent buildings that may create shadows. Wind is often stronger at rooftop heights than on ground level and can seriously damage plants. Structural wind breakers may need to be designed in conjunction with the building frame and they must be able to withstand wind loads.



STEP BY STEP

PREPARE YOUR ROOF STRUCTURALLY.

Ensure it meets municipal building and safety requirements for a green roof.

Also, check that your roof membrane can support walking and planters – you don’t want to risk a leak! Flat roofs are best.

BUILD PLANTERS TO HOLD SOIL. Here we use 2x4 fir on sleepers, allowing for 25 cm (10 in.) of soil. Gravel on the roof encourages drainage, which is an absolute must, so check that your roof drains properly!

LINE YOUR PLANTERS. To contain soil, use 1/2-in. drainboard appropriate for green-roof drainage.

ADD GREEN-ROOF SOIL. Lightweight soil specific for green roofs is placed in raised planters.

PLANT VEGETABLES, HERBS AND FRUIT. Swiss chard, watermelon, iceberg and assorted leaf lettuce, vine and cherry tomatoes, zucchini, cucumbers, peppers and strawberries are our favourites.

WATER. Our vegetable garden is watered using rain collected from barrels.



ADDITIONAL CONSIDERATIONS

Depending on how elaborate you want to go, additional considerations may be:

- Storage or areas for composting.
- Rainwater collection system – possibly from adjacent roofs with storage on garden roof.

- Electricity for running power tools and equipment.
- General security and lock off to ensure only limited access. 🛡️

FOR MORE ON GARDEN DESIGN BY SENGA, go to www.gardenwiseonline.ca

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