

Maker Corner

Green Roof Birdhouse

Have you ever seen a roof with trees and plants growing out of it – on purpose? Many materials like tile and shingles absorb heat during the day and release it at night, making cities warmer. One solution to this problem is to build green roofs.

Like giant planter boxes, green roofs replace solid roof surfaces with soil and plants. This helps moderate a building's temperature and allows water to soak in rather than run off.

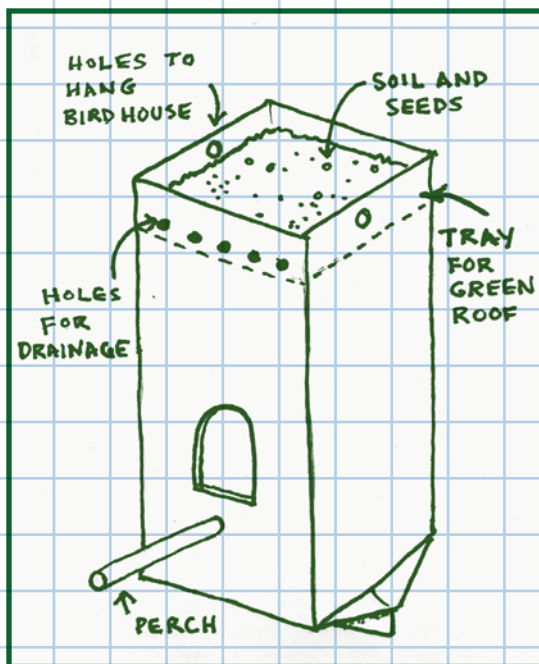
Green roofs adjust to create an ideal surface for each season. The plants shed their leaves in the winter, revealing dark soil that absorbs energy and keeps the building warmer. In the summer, the plants provide shade and give off water vapor, keeping the roof surface and the inside of the building cooler.

Not only do green roofs reduce energy use for heating and cooling in individual buildings, they can also help cool the city. Green roofs are one way to reduce the effects of urban heat islands. — K. Weaver

Green Roof Neighborhood



This special apartment building in a suburb of Copenhagen, Denmark is called "8 House" due to its unique shape – it looks like the number 8 from above. Another thing that is special about this building is what is growing on top. The "8 House" has grassy/mossy vegetation growing on its sloped roofs.



Materials:

- half-gallon carton
- scissors
- stapler
- string
- soil
- grass seed
- stick for a perch
- paint or other decorations

Instructions:

1. Staple the top of the carton closed (if needed).
2. Cut off the bottom of the carton and flip it over to make a flat tray. Staple to the bottom of the carton as shown.
3. Use the scissors or a nail to (carefully) make a few small drainage holes around the side of the tray, and two larger holes to attach the string for hanging.
4. Cut a hole in one side of the carton for the birds to enter.
5. Decorate the outside and add the perch.
6. Add the soil to the tray, sprinkling seeds on top.
7. Water your green roof (not too much) and watch as it grows!

Be Inspired:

Try making a green roof for a larger birdhouse, a doghouse, or a shed (with adult permission, of course). What might you have to do differently for a larger roof? For example, how much weight can the roof structure support? What could you use for drainage under the plants?