

GREEN ROOFS

WHAT ARE THE BENEFITS OF GREEN ROOFS?



Beacon Institute Green Roof
<https://www.dec.ny.gov/lands/63456.html>

- Rainwater retention, reduces runoff improving water quality
- Conserves heating & cooling energy by insulating roof
- Mitigates urban heat island (*even in the suburbs!*)
- Improves air quality
- May increase the longevity of roofing membrane
- Provides habitat for wildlife

THERE ARE TWO TYPES OF GREEN ROOFS:

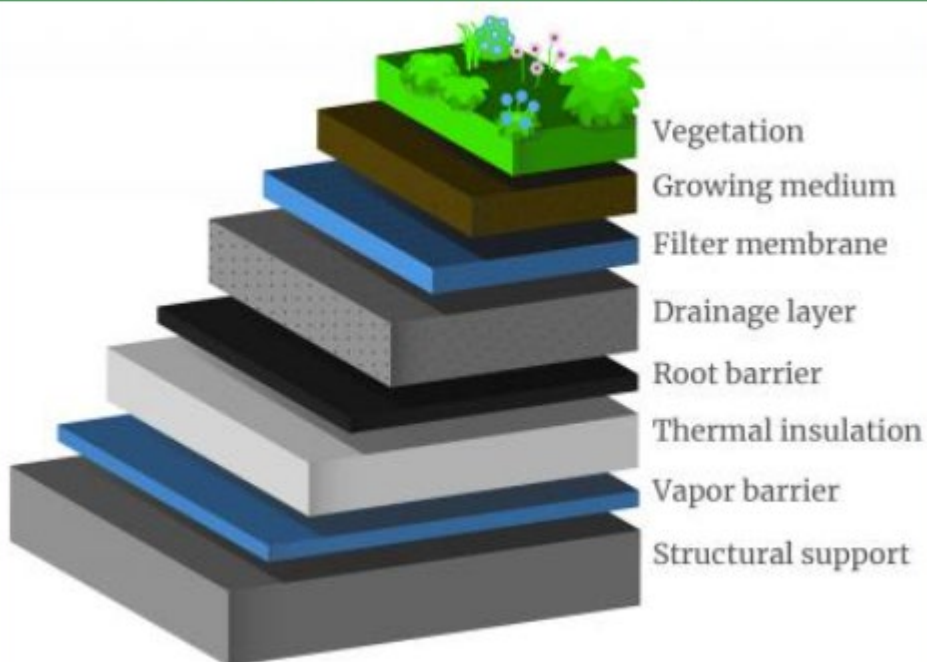
EXTENSIVE: for private houses & small structures

- soil depth 3 to 6 inches
- lightweight planting media, 15 to 50 lbs per sq ft
- only 10 to 20% organic matter needed in soil mix
- small plants requiring low maintenance, low nutrients & low irrigation

INTENSIVE: for apartment & commercial buildings

- soil depth 6 inches or more
- heavier roof load, up to 150 lbs per sq ft
- can include trees & shrubs, requiring maintenance, irrigation & fertilization

Common Green Roof Layers



**IF YOU WANT TO INSTALL
A GREEN ROOF, YOU
MUST GET PROFESSIONAL
PE AND LA ASSISTANCE!**

More information:

<https://www.epa.gov/heat-islands/using-green-roofs-reduce-heat-islands>

<http://libguides.nybg.org/greenroofs>

<https://greenroofs.org>

<http://www.belknapccd.org/wp-content/uploads/sites/18/2013/07/Green-Roof-for-Small-Structures-BCCD-Handout.pdf>

GREEN ROOF DEMO PROJECT 5/5/2019

Ardasley High School Environmental Science Club:

Ms. B. Palucci/Faculty Advisor; E. Caceres/Chair, M. Murthy, J. Holt, A. Arif

Location: McDowell Park

Project:

A small green roof demonstration project using a doghouse with an asphalt shingle roof
(Trixie Pet Products, Fort Worth TX).



Assemble planting box using pressure-treated wood, Tygon drainage tubes & stainless steel hardware.
(Note: if a pet is using this doghouse, don't use treated wood.)

Set
planting
box on
top of
doghouse



Set doghouse on
cinderblock base.



Install
vinyl pond liner
(Total Pond, West
Palm Beach FL)



Install
filter
fabric
(Vigoro
Lawn
Products)



Install washed
gravel drainage
layer (Rosedale
Nurseries
garden supplies)

Arrange plants in box:
Sedum spurium
'Tricolor'
'Fuldaglut'
'John Creech'
Sedum floriferum
(Rosedale Nurseries)



Add extrinsic
planting
media
(Naturcycle,
Plainville NY)



**VISIT THE
GREEN
ROOF DEMO
AT
McDOWELL
PARK!**

