

How to build a rain garden planter

Why build a rain garden ?

Not only does this save water (reduced need for watering) but it also slows the flow of water into the drains. This can help prevent the drains from getting overwhelmed, reducing the risk of flooding.



How it works

A rain garden planter makes use of the water that lands on the roof. Water from the downpipe is directed into the planter. The soil / compost mix absorbs and stores the rainwater for the plants to use. Excess rainwater filters into the gravel layer and drains out the base drainage pipe. Any water that pools on the surface, drains down the overflow upstand.

You will need:

- A planter
- 40mm push fit waste pipe (length+height of planter)
- 40mm push fit waste pipe 90° bend
- 40mm push fit waste pipe tank connector
- Geotextile (weed suppressant fabric) or hessian
- Sealant such as roof and gutter silicone
- a leaf guard
- 20mm gravel - it must be free of grit so rinse it thoroughly if it is gritty
- 44mm hole saw and hole saw arbor (to be used with a drill)
- A hacksaw and a rounded file

The planter must be robust enough to take the weight of the drainage materials even when saturated and be at least 60cm deep (a cattle trough is ideal). A wooden planter would need to be lined with a pond liner first.

Steps

- 1) Find a suitable location next to a downpipe for your planter. Decide where you need the base drainage outlet to be and use a hole saw to create the hole.
- 2) File off rough edges with a round file, enlarging the hole slightly to fit the tank connector.
- 3) Cut two lengths of pipe to size with hacksaw or wood saw.



The planter should be located so it drains to the existing drain at the base of the downpipe



The overflow upstand (upright piece) should come up to 10cm below the lip of the planter when fitted to the bend (including the leaf guard). The base drainage pipe (horizontal piece) should fit the length of the planter including the bend (with some allowance so it can be fitted easily).

- 4) Drill 5-7mm drainage holes in a zigzag along the top side of the base drainage pipe.
- 5) Add a leaf guard to one end of the overflow upstand.
- 6) Connect the pipes using the 90° bend.
- 7) Add the tank connector to the end of the base drainage pipe.



A leaf guard can be mesh attached with a cable tie or a socket plug with holes drilled in it

The pipework should look like this once installed.



- 8) Fit the pipework into the planter by inserting the tank connector into the base drainage outlet. Use silicone sealant around the hole to prevent leaks.
- 9) Move the planter into its final position – ensure it is not covering any airbricks or ventilation.
- 10) Add 10cm of gravel to cover the base drainage pipe.



The gravel can be used to prop up one end of the base drainage pipe so it slopes slightly towards the outlet. Keep adding gravel until the pipe is just covered.

- 11) Cover drainage layer with a sheet of geotextile or hessian, to stop soil filtering into drainage.
- 12) Use a mix of 60% sandy loam topsoil, and 40% compost (preferably peat free) to fill the planter to a few cm below the overflow upstand. Tread down layers lightly during filling.
- 13) Plant with plants that can withstand occasional dousing with rainwater but bear in mind the planter will be quite free draining. For a list of potential plants go to www.raingardens.info
- 14) Divert your downpipe into the planter, placing pebbles at the point of entry to prevent erosion.

If you install one, or something similar, please email us a photo at:
info@southeastriverstrust.org