

How to build a rain-box planter



Building a rain-garden is an easy way to help minimise the local flooding that can occur in Hassocks after heavy rainfall.

Rain-box planters are more than simple garden planters, they are specially designed to receive and filter rainwater from a diverted downpipe. Inside, a waterproof liner contains layers of soil and sand for filtration. In the base, buried in a layer of gravel a slotted pipe returns the filtered water to the drain or ground.



CUT TIMBER

Cut the timber to make the short and long sides of the planter. Also cut 2 battens and cut the tops off at 45°.

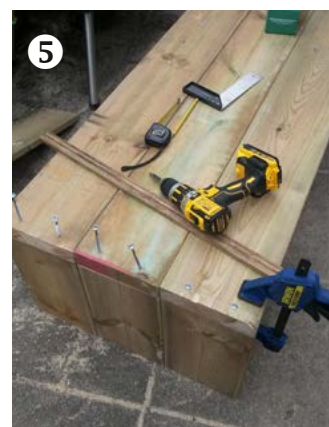
Start with the short sides. Lay the battens in place butting them up to the sides of the planks. Hold the battens securely and drill pilot holes.

If possible, recess the screw heads to prevent the screws catching on the liner.

SCREW TOGETHER

Line up the pilot holes and fix in place with timber screws. Repeat to build the other short side.

Sand any rough edges that might puncture the liner and paint or stain the wood as required to extend the life of your planter.



ADD SIDES

Fix the first short side to the long sides with torte screws. Repeat to build the other side.

ADD THE BASE

Turn your planter over and fix decking planks to form the base. Drill a hole in the side or end of your planter using a flat head bit or hole-saw - this hole will take the plastic drainage pipe so position it accordingly. Drill some drainage holes in the base to prevent rot.

WANT MORE IDEAS?

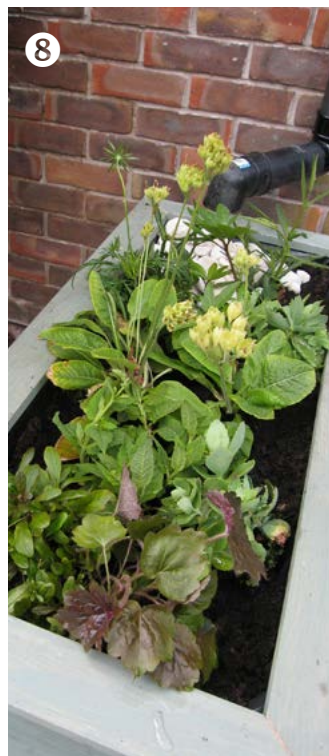
For a FREE guide covering the small actions we can all take to mitigate against flooding please email:

info@oart.org.uk



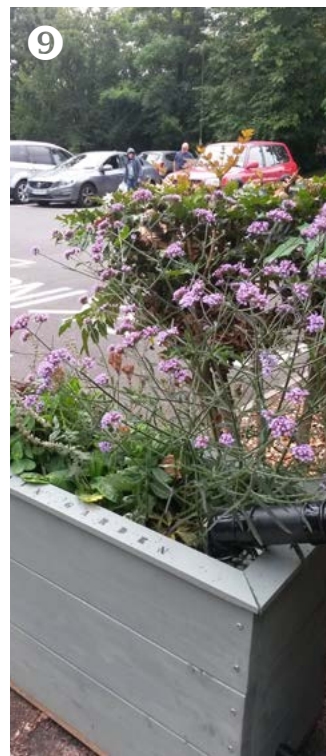
LINE PLANTER

Line the planter with some robust plastic sheeting or PVC pond liner, allowing plenty of room for the liner to stretch. Fix with staples or a wooden batten along the top edge. Make a small hole for the drainage pipe in the liner. Drill holes in the horizontal pipe (smaller than the gravel) and check all the pipework fits together as shown in the diagram below. Move the planter into its final location and stand it on bearers.



ADD DRAINAGE PIPE

Add some gravel to the base and position the slotted pipe so that it drains down towards the outlet and push the drainage pipe through the liner. Connect up the overflow. Seal the pipes with silicon and tape. Add the remaining gravel to cover the pipes and top with permeable membrane to stop the rainwater washing the soil out. Add a layer of sand then fill with a mix of soil/compost to sand in the ratio 4:1.



CONNECT UP PLANTER

Cut off or divert the downpipe from the roof to flow into the rain-box. You may need to add a downpipe shoe to direct the water. Place some large stones below the spout to prevent splashing and a debris filter on the overflow pipe. Plant with a variety of suitable perennial plants tolerant of dry conditions and able to withstand short periods of immersion, including interest all year, and plants for pollinators.

MATERIALS

Makes a planter 1.5m long x 0.45m wide x 0.6m high

TIMBER

6 short sides 355x195mm

6 long sides 1445x195mm

4 battens 50mmx6mm

Decking board 4.8mx 32mmx150mm

Batten for top

2-3 bearers

40 single thread wood screws 5.0x50mm

24 torte screws

Plastic liner (2mx3m)

1.8m of 32mm plastic waste pipe

1 x 90° bend connector

1 x equal tee connector

Downpipe connectors / shoe as required

Silicon sealant

Waterproof tape

4 bags soil / compost

2-3 bags sand

3-4 bags gravel 200mm

Geotextile membrane

Plants

EQUIPMENT

Drill & bit set

Screwdriver

Timber saw

Hack saw

Tape measure

Pencil

Knife / scissors

Safety glasses

Dust mask

Set square (optional)

