



# GREEN YOUR ROOF

a free guide to doing it yourself

This guide [tinyurl.com/l9tdbv](https://tinyurl.com/l9tdbv)

Building Green [www.building-green.org.uk](http://www.building-green.org.uk)



## 1 Start with a shed



Assemble your materials:

- Bog standard flat pack shed. This one cost about £100. - Various lengths of timber. Mine were from a wood recycling project and cost about £10.

- Butyl pond liner for waterproofing - you can get this at a garden centre. Enough to cover the roof area comfortably and go over the edging boards. About £15 for 1x1.5m.

- Gardening fleece to cover roof area x 2. A few quid. - Growing medium ('substrate'). Mix your own using perlite and/or vermiculite and compost; or buy a ready made green roof mix. The key is to reduce weight.

For examples of green roofs on different shed types, visit our [website](#). You can do a shed roof at any time of year, but late winter/early spring is a good time.

## 2 Strengthen the shed



Use battens (here shown as the darker coloured cross-pieces on the sides) to strengthen the shed. This is to enable it to take the extra weight of the roof and stop it twisting.

## 3 Strengthen it some more



Extra joists screwed in to support the weight of the substrate on the roof deck.

## 4 Strengthen yourself



Be strong. Drink tea. Prepare yourself.

## 5 Sand all timbers



Make sure you sand all timbers used for the roof to minimise the risk of splinters causing leaks.

## 6 Fix arris rail and fascia board



- Nail or screw the fascia board (the flat one at the front) to the ends of the roof joists.
- Screw arris rail (the curved wood - could be triangular, doesn't matter) to the fascia and the roof.
- Screw to short uprights the same height as the side boards you will fit.
- Determine the height of the side boards by the depth of substrate you want. Deeper substrate will allow a more varied range of plants to grow - but will be heavier. At least 80-150mm deep substrate is recommended.

## 7 Another view...



...of the fascia board fixing.

## 8 Fit spacers



In this design, excess water will run over a hidden fascia, behind the main fascia board. Spacers are used to separate the two facias. Use three or four spacers like this.

## 9 Fix side boards



These boards (white in this picture) make up the sides and back of the green roof. I used old skirting boards - slightly thicker boards would have been stronger, but heavier. They determine the depth of substrate you will have.

## 10 The back board



Showing the back board fixed. It is screwed to the roof joists, and the short upright pieces joined to the side boards.

## 11 Fit a batten



The batten (pale cross-piece) helps stop the substrate slipping down the sloping roof. Nail or screw it to the side boards.

## 12 A layer of fleece



A layer of fleece helps guarantee against sharp edges puncturing the liner.

Leave over a foot-wide strip and save for later.

### 13 The butyl liner



Fit the butyl pond liner in place - don't nail it! Or trim it yet.

### 14 More fleece, and substrate



Another layer of fleece, and you can put the substrate in. BUT FIRST, put a deep layer of vermiculite (blown clay) at the front to help with drainage.

Use a local child, if you have one!

### 15 Drainage detail



Get the cut off strip of fleece, and put over the vermiculite. Push substrate on top.

### 16 Fix the front edge of the liner



Fold over the excess liner at the front, and fix behind the spacers you screwed on earlier. This is the lip that excess water will drain over.

## 17 Fix the second fascia



Screw your finishing fascia onto the spacers, using board the same width as the side and back pieces.

## 18 Select plants or seeds



A wide range of plants can be used on a roof, or you could let it colonise naturally. When choosing what to grow, things to think about include:

- depth and type of substrate used
- amount of sun and/or wind exposure
- plants which tolerate dry conditions. Watering your roof regularly isn't very sustainable!
- plants which attract wildlife and flower through as much of the year as possible.

This roof is in the shade all day, so I used lungwort, a range of sedums and I'll see what happens. I plan to get hold of some woodland plants for next year.

Planting ideas and resources are available at the [Building Green](http://www.building-green.org.uk) website.

## 19 Overview of the green shed roof



Edging strips hide the liner and neaten up the roof appearance. Hiding the liner also helps it last longer - less sun, and exposure to sharp objects.

It's good to mound up the substrate in places, and use stones and wood to vary the habitat. This means there will be more plant variety and more wildlife - and it looks more interesting.

This picture shows the roof straight after planting - it will fill in as the plants get established. I plan to take a series of these over the months to see how the plants establish.

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