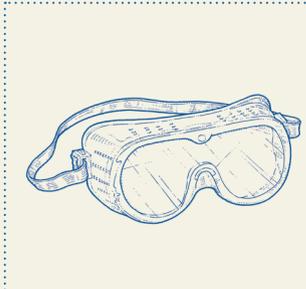


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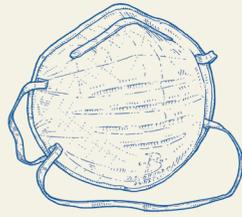
Tools and Materials

Anyone who's tried and failed at DIY will think it's their fault. But nine times out of ten it's because they haven't got the right tools for the job. DIY is like any other practical task – you need the right kit if you're going to get anywhere. Spend some time getting to know the materials you'll be working with, visit a few DIY merchants or timber yards, and familiarise yourself with the different materials, such as plywood or regularised timber. And, if you've haven't got them already, borrow or buy good quality tools – they're a pleasure to use and will do half the work for you.



Safety goggles

These are essential eye protection for most building tasks.



Dust mask

Provides clean and safe air when working with potentially hazardous dust and wood particles.

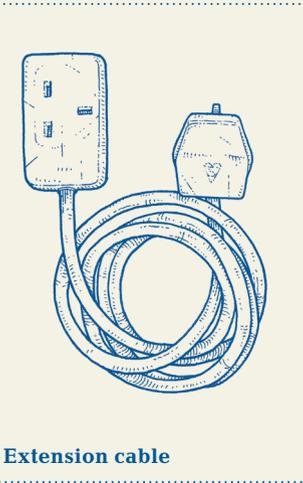


**Ear defenders
(if using the mitre saw)**

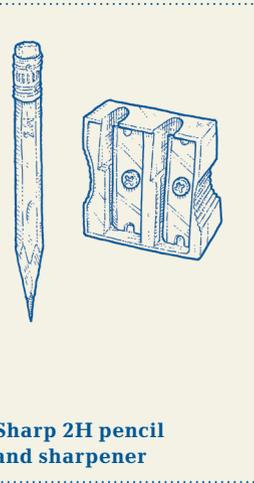
These will reduce potentially harmful machinery noise.



Step ladder



Extension cable



**Sharp 2H pencil
and sharpener**

USEFUL EXTRAS

Alongside the essential tools and various timber components, you will also need the following items:

- Screws
- Grab adhesive
- Exterior-grade flexible decorator's caulk
- Interior-grade flexible decorator's caulk

- Mallet
- Nails
- Craft knife
- Nail punch
- Staple gun
- Sharp chisel

- Paintbrushes
- Silicone sealant
- Timber preservative
- Spanner
- Bag of wedges

1.2 TIMBER AND SHEET MATERIALS

For this shed build, you will use the following timber sizes and sheet materials in the framework, floor and roof. When you buy the materials, the key measurement is their actual size.

Nominal size: Imperial	Nominal size: Metric	Actual size (approx): Metric	What the material is for
2 x 3in regularised timber	5 x 7.5cm regularised	4.5 x 7cm	Wall frames; wall plates
2 x 4in regularised timber	5 x 10cm regularised	4.5 x 9.5cm	Floor frames; roof frames; bracing beams
1 x 6in regularised timber	2.5 x 15cm regularised	2 x 14.5cm	Fascias
4 x 8ft sheet insulation	122 x 244cm	122 x 244cm	75mm thickness for the floor insulation
4 x 8ft plywood	122 x 244cm	122 x 244cm	18mm thickness for the floor; 12mm for the roof; 9mm for the soffits

2.8 CUTTING SHEET MATERIAL

Most sheet materials, such as plywood and solid insulation, come in large 122 x 244cm (4 x 8ft) sheets. This shed build has been designed so that you'll mostly use full sheets, but there are a few occasions when you'll have to cut them down to size. So what's the best technique for getting a neat, straight cut every time?

Materials

- Timber sheet/rigid insulation sheet

Tools

- Tape measure
- Sharp 2H pencil
- Long, straight edge, to act as a ruler
- Handsaw (or a jigsaw or circular saw)
- Pair of trestles

Step 1

Use a tape measure and a 2H pencil to mark the top, bottom and middle of the intended cut on your sheet – never rely on just two marks. Find something with a long, straight edge to act as a ruler (use a straight length of timber, a long spirit level or the edge of another sheet) and join up the pencil marks.



You'll need a pair of trestles upon which to rest your timber sheet or rigid insulation sheet securely (see Essential tools, page 15).

Step 2

Checking you are not going to hit the trestle leg, cut on the waste side of the line with a handsaw (or a jigsaw or circular saw, if you have one). Support the sheet with your free hand.



Step 3

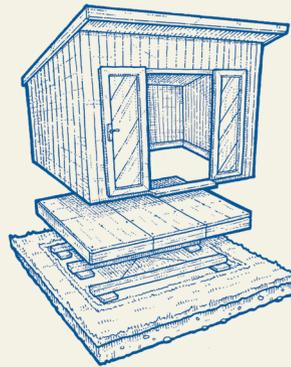
Near the end of the cut, use your free hand to support the waste side of the wood as it falls away. If it's too heavy to hold with your free hand, get someone to help, or use your portable work bench as a prop.



3.1 FOUNDATIONS: CREATING THE SHED BASE

Solid, level foundations are essential for your shed, but there are a number of ways to achieve the same result. The key is to find a solution that takes into account your skill level, budget and the existing ground conditions.

There are lots of different ways to build a shed base, some more costly than others. As a general rule, the more expensive the initial outlay, the longer your shed will last, but your choice will also be dictated partly by the site on which you are building. There are three methods described in the following pages, each with its own pros and cons.



Timber bearers

An inexpensive, quick option that uses pressure-treated timbers and concrete paving slabs to lift the shed slightly off the ground.

Pros: A simple, low-cost technique that provides a medium-term solution.

Cons: You need a level, firm surface to build on; the timbers will eventually rot – most pressure-treated timber for ground contact has a maximum 15-year warranty.

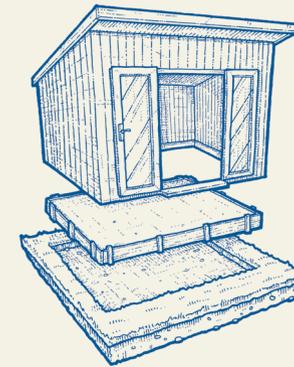


Adjustable piles or feet

In the same way that kitchen base cabinets have adjustable feet to even out differences in floor height, you can source adjustable metal piles or feet that lift the shed base off the ground and allow you to level it up (we use this method).

Pros: Easy to fit, long lasting and can tolerate around 15cm of adjustment for uneven sites. Can be used on soft ground or hard surfaces. Won't be affected by damp because air is able to circulate under the building.

Cons: Adds a few extra centimetres to the height of the shed, so this will need to be taken into account for any local planning restrictions. To get around this, you can always dig down first.



Concrete base

This is the 'belt and braces' approach, and it's the best option for unpredictable or variable ground conditions – some sites can be prone to waterlogging, for example, or are too soft for metal piles.

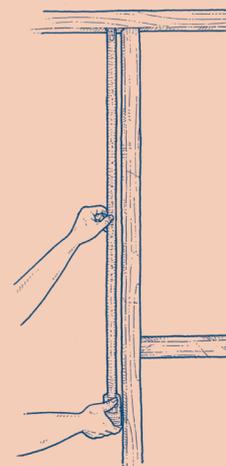
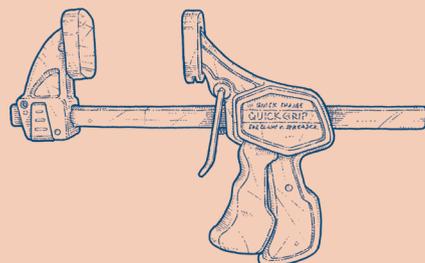
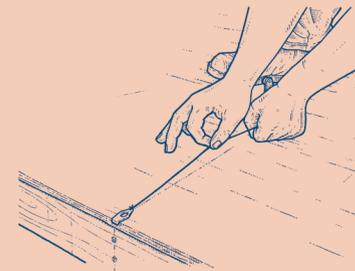
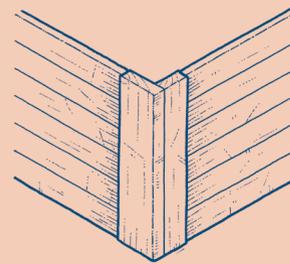
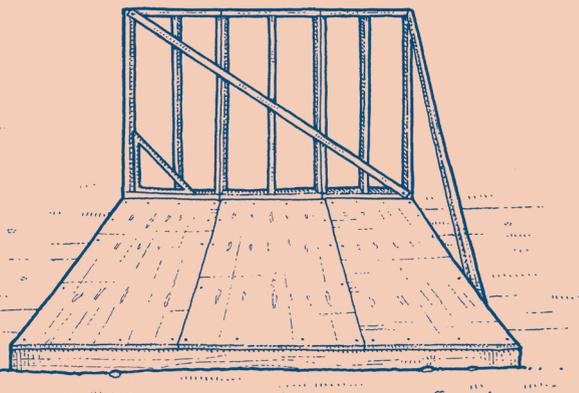
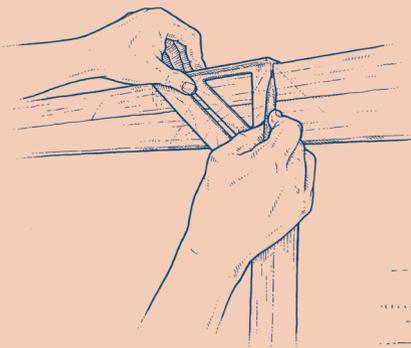
Pros: Will stop anything growing underneath the shed; can support heavy weights – items such as pottery kilns, large machinery, printing presses and hot tubs can exert huge forces that need a solid base.

Cons: Laying a concrete base is time-consuming, relatively costly and requires a level of skill that might be daunting for the first-time DIYer.

In summary, if you're going to the expense of insulating, glazing and kitting out your shed, or you're going to fill the shed with heavy equipment, it's better to use piles/feet or a concrete base, which will last a lifetime; timber bearers will be fine if you want to build a simple version of the shed and don't mind the foundations having a shorter life.

General knowledge

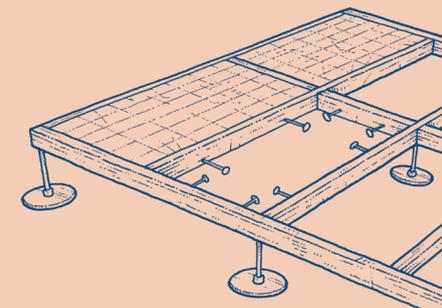
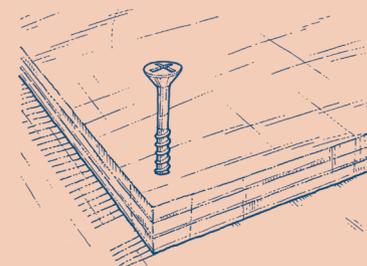
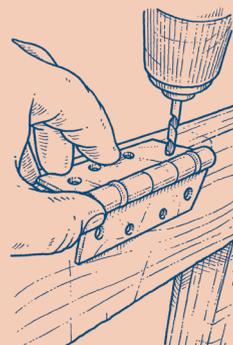
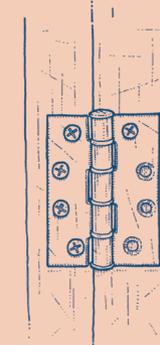
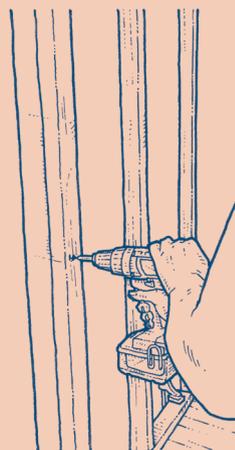
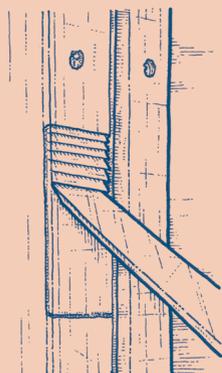
If you haven't got the time, skills or confidence to create a concrete foundation yourself, a builder can easily do this part of the shed build for you. Get three quotes, price the materials yourself and expect the job to take no more than a day to complete.



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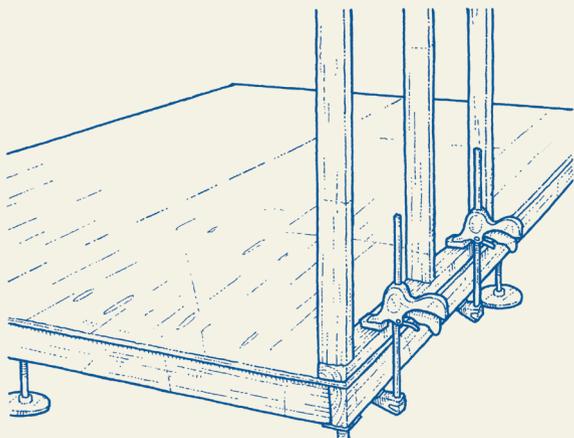
The Big Build

So, you've got your foundations in place and familiarised yourself with the skills you'll need for the build. You probably won't tackle this build in one go – break it down into manageable days, take it a few steps at a time, and check that you've got everything in the Materials and Tools lists before you dive in. If you have any problems as you go, check the blue tips boxes or have a quick glance back at the Shed Skills section to remind yourself of the best method.



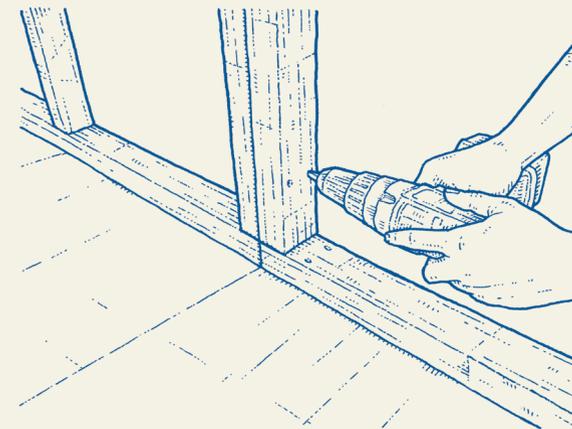
Step 6

Lift one frame and place it at the back right-hand corner of the shed floor. Making sure that the edges of the frame are flush with the edges of the plywood, clamp the frame to the floor in two secure places.



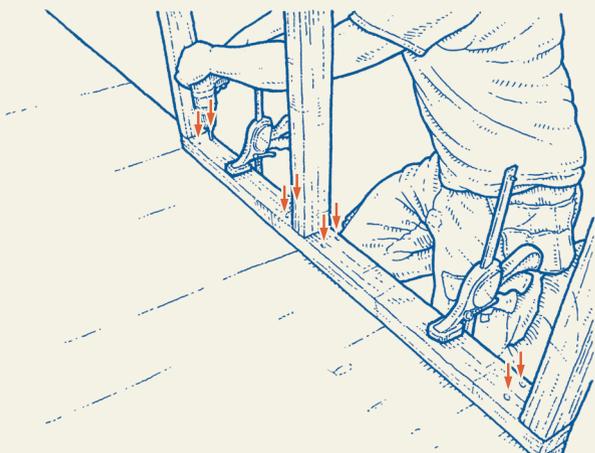
Step 9

Pre-drill and fix the two frames together using 5 x 70mm screws. Fix two screws approximately 10cm from the bottom internal corner. The screws should be 3cm apart.



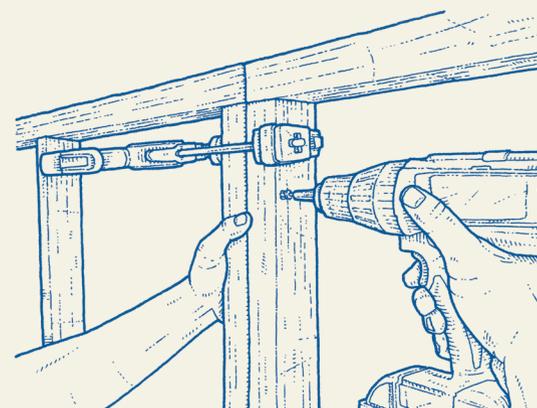
Step 7

Pre-drill and fix the bottom rail to the plywood floor in the frame's four internal corners, using two 100mm screws 3cm apart (8 screws in total).



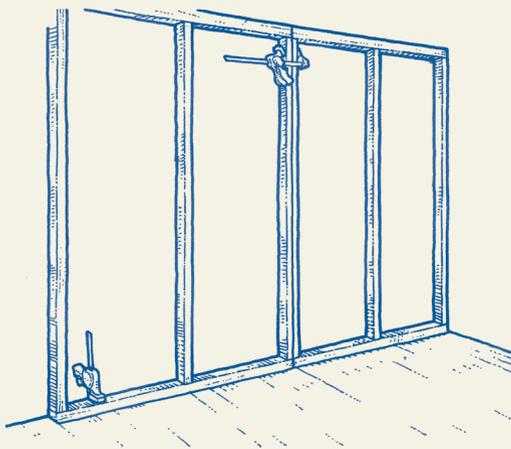
Step 10

Repeat this process 10cm down from the top internal corner and lower down the frame in mid-stud.



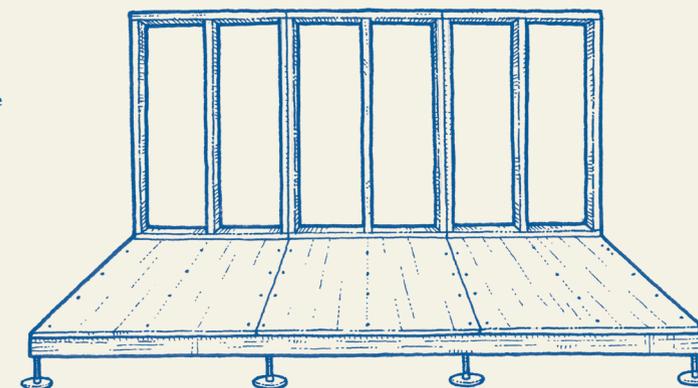
Step 8

Lift the next frame into place and clamp it to the first frame and to the floor, making sure that the edges of the frames line up and that the frame is flush with the edge of the plywood floor. Again, pre-drill and fix the bottom rail to the plywood floor in the frame's four internal corners, using two screws 3cm apart (8 screws in total).



Step 11

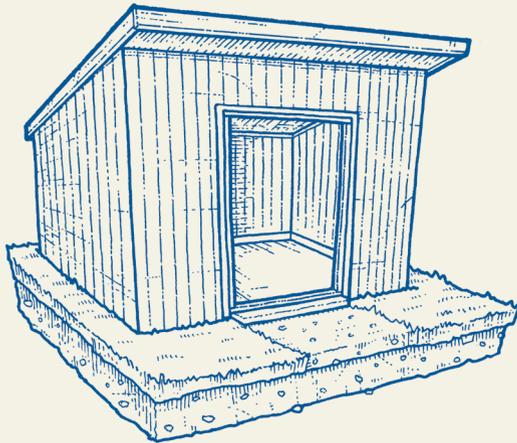
Repeat Steps 8 to 10 for the final frame, making sure that the frames line up and that the frame is flush with the edge of the plywood floor.



4.15 DOOR OPTIONS

So, the frame and roof structure are complete and it's time to turn our attention to the door. This is where you can start to personalise the project and make it a shed that's truly yours.

When it comes to doors, there are multiple possibilities. To keep things simple, this is a shed designed without windows (although you can add a window if you like – see Adding a pre-hung window, pages 96–98). All of the natural light comes from the double-door aperture at the front. However, what you do with that aperture is up to you.



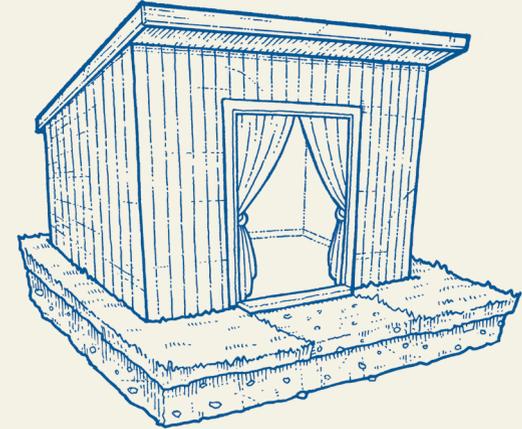
Double-glazed French doors

For the shed in this book, there is a big enough gap to do a number of things. The first option is to fit standard-sized 152.5 x 198 cm (60 x 78in) double-glazed French doors, which will give you plenty of light, and keep the shed warm – perfect for a studio or year-round garden retreat. (We'll show you how to fit these doors on the following pages.)



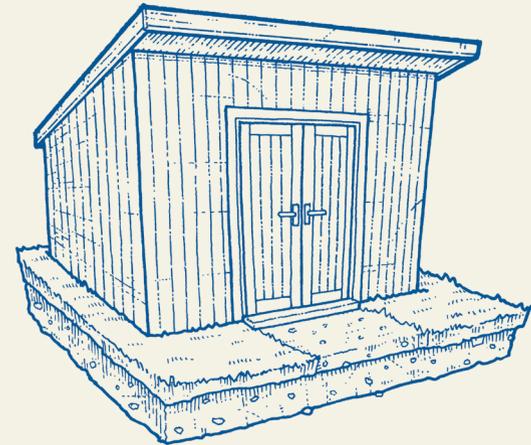
Open aperture

The second option is to leave the aperture open and simply frame the edges for a neat finish. This creates an attractive open-fronted summerhouse – ideal for entertaining on balmy nights or whiling away the hours with a good book. You could add a door curtain for privacy, or hang fairy lights around the entrance. If you do opt for this opening, it's important that you weatherproof the interior, either by sealing or painting it with an exterior finish, or choosing materials that can cope with being permanently outdoors.



Solid doors

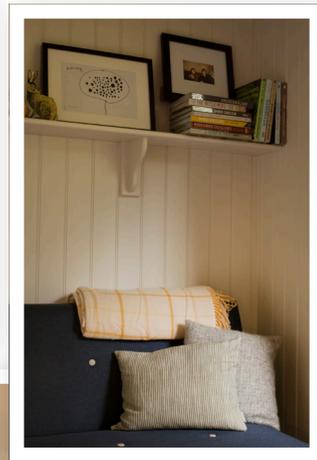
Another idea is to fit a pair of solid doors. If you want to use the shed as a secure lock-up or bike garage, for instance, and prefer security over natural light, then this is a great option. Or, if you need a workshop and don't mind working with the doors open, then solid doors are for you. If you want the security of solid doors but do need natural light, you can always add windows either side of the doors or on the gable ends (see Adding a pre-hung window, pages 96–97).



Part-glazed double doors

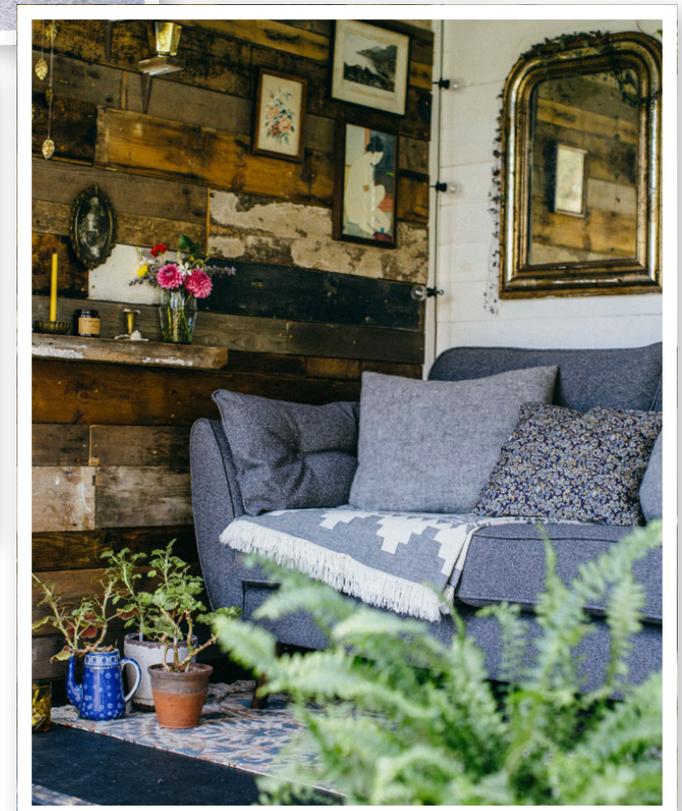
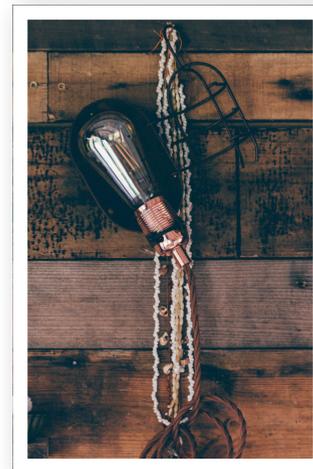
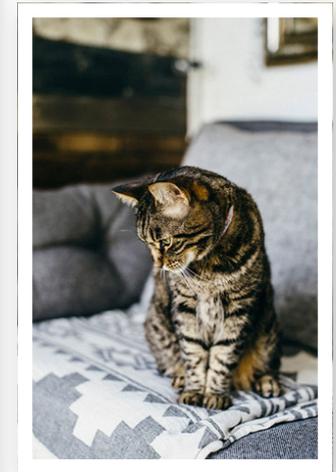
If you need natural light but don't want full-height glazing, part-glazed double doors would be useful. You might find that full-height glazing lets in too much light, or doesn't offer enough privacy, so think about which way your shed doors will face and what you want on show.





Writer's retreat

Crisp white walls, black timber exterior – the perfect backdrop for the author's shed office. A woodburner, sofa bed and trestle table create a practical, but snug writing space tucked away in the corner of an orchard.



Rustic den

Salvaged timber, a midcentury-style zinc-grey sofa, cushions piled high and indoor plants – a relaxed, vintage aesthetic works well for blogger, Jeska Hearne's gorgeous tea shed.