



**Outdoor DIY guide**



# Introduction

At QEP, we want to help you make the most of the great outdoors. When it comes to a garden, there's no denying that you get out what you put in, and a few DIY projects can be an easy way to make it a more functional and enjoyable space.

What's more, nothing beats the satisfaction of making something yourself, and the great thing is that once you master the basics of DIY there's no stopping you!

This handy DIY guide includes a number of projects that range from quick tasks perfect for beginners, to tasks that you can really get stuck into over a sunny weekend.

Whatever your level of skill, just take your time and follow each step carefully. It's also important to strictly follow the safety guidance provided. Some other general good tips include:

- Use the right tool for the job and store them safely once you're finished
- Don't wear any loose clothing or jewellery in case it gets caught
- Work in a clean and organised space
- Always wear the correct safety gear and have a first aid kit nearby just in case
- Unplug drills before you fit or remove accessories
- Cut away from your body when using a knife





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# Building a bird house - beginner

Bird houses are a fantastic addition to any garden. Not only do they provide a sanctuary for birds to live and nest, but any residents you attract may also help you with pest control and reward you with choruses of birdsong. This is a simple DIY bird box made from a single panel of wood and only requires a few tools. It's also much cheaper than buying a bird box, leaving you with more money for bird seed!

## What you'll need:

- 1 x 150cm x 15cm x 1.25cm wooden plank
- 1 x 50 pack of Ovalok Deck Screws 4.5 x 40mm
- Drill
- Flat wood drill bit (between 25mm – 32mm)
- Saw
- Screwdriver
- Tape measure
- A Plasplugs Handvice or workbench

## Things to consider

- You'll need a 'bird-friendly' location in your garden. Try to find a quiet, protected spot outside that will be shielded from direct sunlight or strong winds. You should also hang your box at least three metres above the ground to keep away from predators like cats and foxes
- Always use gloves and a dust mask when sawing wood
- Take care when using ladders

## Stages

### Step 1: prepare your supplies

Select your timber and use a pencil to mark out the sections that will make up your bird box:

- 45cm x 15cm for the back panel
- 11cm x 15cm for the base
- 20cm x 15cm for the front

Also cut two side panels for a sloping roof, 25cm high on the back x 20cm high at the front. Use a Plasplugs Handvice or a workbench to secure the wood in place and cut along your lines with a saw.



## Step 2: begin assembly

Take one of the sides and nail it gently to the base of the bird box, and then nail these to the back section. Carefully turn it over and repeat with the other side.

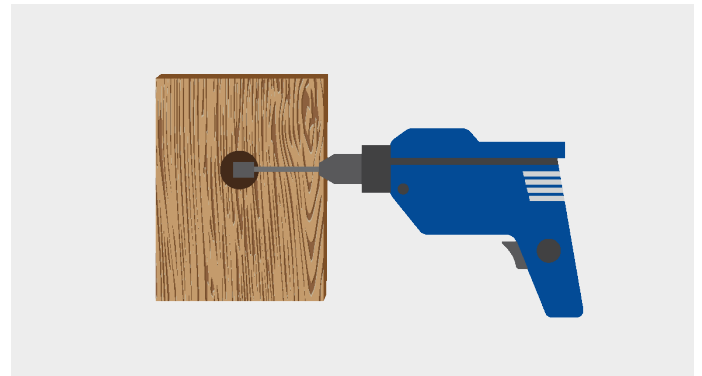
Use three Ovalok galvanised for each join. Drill a 5mm hole at the top of the backplate, this will enable you to hang the birdbox later.



## Step 3: create the entry hole

Drill a hole in the front section of your bird box using the flat wood drill bit. The size you drill will depend on what type of birds you want to attract: an opening of 25mm is perfect for blue tits, whereas 32mm is a better size for sparrows.

Then, place the bird box on its back and nail the front to the side sections.



## Step 4: fix the roof

Finally, attach the top of the birdbox to the sides and the front. Mount your new birdbox onto the side of a tree trunk by fixing a self-tapping wood screw through the hole in the backplate that you drilled earlier.



## Top tip:

The Plasplugs Handvice is a useful little tool that will help you securely hold materials while cutting and drilling. It's durable, lightweight and compact and can be used on any surface. Its design means that, unlike other workbenches, it is compact and doesn't require any preparation time!



# Hanging a wall planter or hanging basket - beginner

Wall planters and hanging baskets are a perfect way to brighten up your garden, especially if you're looking for ways to save space. They don't require much maintenance and can be used to grow a huge range of plants, flowers and herbs. The good news is that they're incredibly easy to hang, making it a perfect quick Sunday afternoon job that gives great results.

## What you'll need:

- 1 x Plasplugs Outdoor Accessory Fixing Kit
- 1 x 8 mm masonry drill bit
- Electric hammer drill
- A hanging basket with bracket
- Step ladder if required

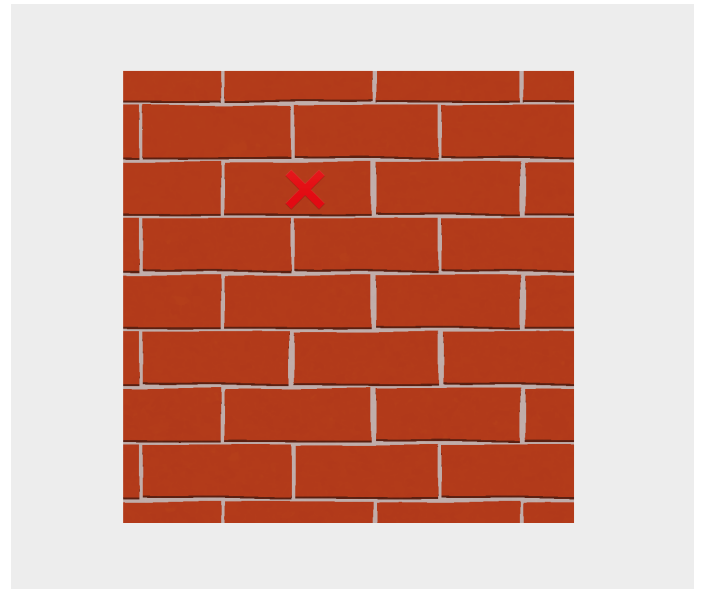
## Things to consider

- Always use gloves and protective eyewear when drilling
- Take care when using ladders
- The Plasplugs Outdoor Fixing Kit has a maximum fixture thickness of 30mm

## Stages

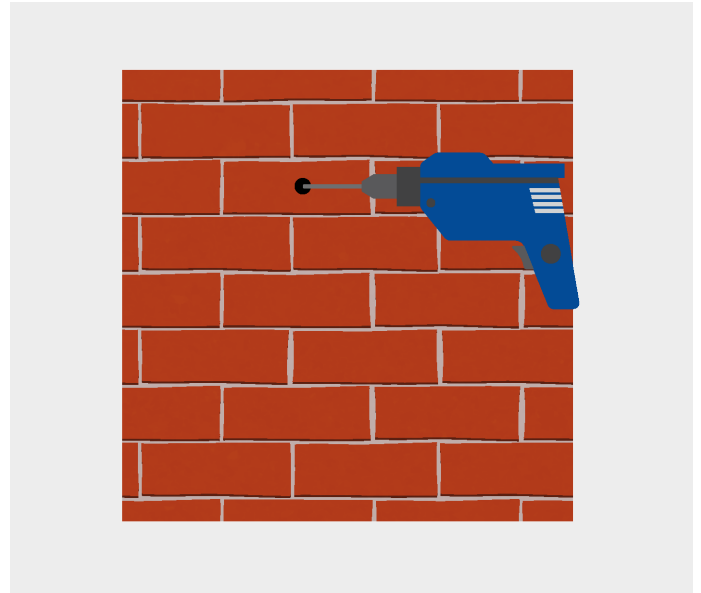
### Step 1: pick a location

Once you have decided where you want to hang your planter, place the bracket against the wall and use as a stencil to mark the circles on the backplate.



## Step 2: drill the hole

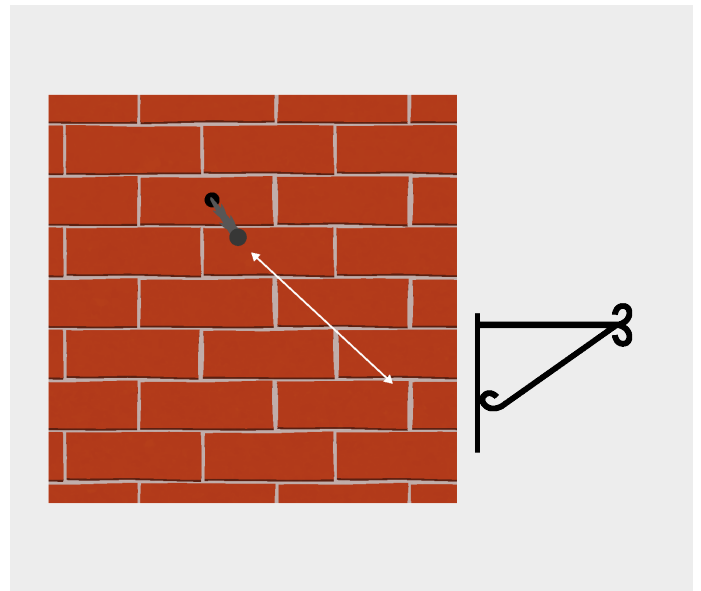
Using an 8mm masonry drill bit, at 90 degrees to the wall, carefully drill the marked circle to the full depth of the bolt.



## Step 3: attach the bracket

Place a bolt into the drilled hole; you may need to tap in gently with a hammer. Ensure sufficient thread is protruding for you to mount and bolt the bracket.

Slide the bracket over the bolt, thread the nut over the bolt and tighten.



## Step 4: hang the basket

Simply hang your basket onto the bracket and enjoy all year round. Don't forget to water it!

### Top tip:

The Plasplugs Outdoor Accessories Fixing Kit includes 4 through bolts, 4 washers and 4 nuts. As they are heavy duty, they will withstand the basket's weight and will prevent it becoming loose over time.



# Creating a composter - intermediate

Do your bit for the environment by creating a composter to turn kitchen and garden waste into nutrient-rich mulch for your garden. Not only will you be doing your bit to reduce the amount of waste sent to landfill, but your plants and flowers will thank you for it. Building a composter is easy, making it an ideal project for any DIY beginner. The following guide makes a 2m<sup>2</sup> composter but can easily be scaled up or down depending on the size of your garden.

## What you'll need:

- 16 x 1.9cm x 10cm treated timber panels, cut to 200cm in length
- 8 x 10cm x 10cm treated timber fence posts, cut to 200cm in length
- 4 x bags of premixed concrete
- 2 x packs of Plasplugs Ovalok Decking Screws or Plasplugs Galvanised Nails
- Drill driver, manual screwdriver or hammer depending on choice of fixing
- Spirit level

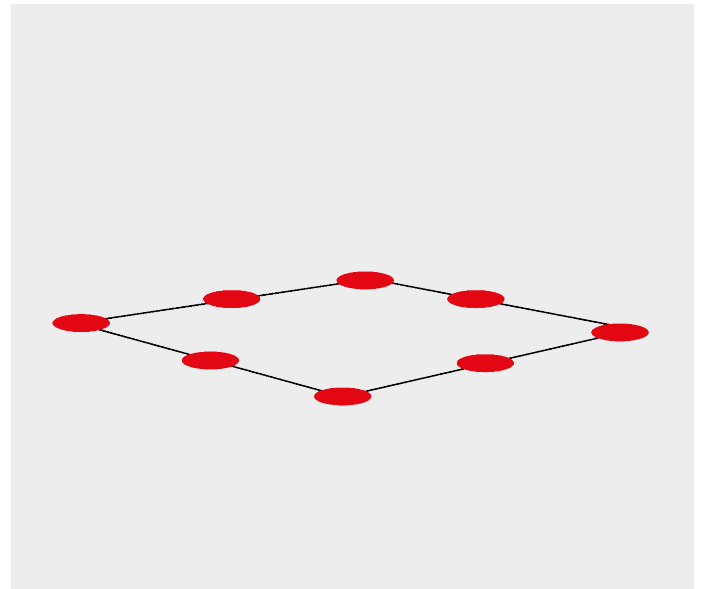
## Things to consider

- Always wear gloves when mixing concrete
- Use a dust mask if completing any aspects of the project in a confined space
- Never lay concrete below freezing
- Clean concrete off tools immediately
- Take care when operating tools and equipment

## Stages

### Step 1: measure out the space

Find a flat area in your garden and measure out 2m<sup>2</sup>. Mark where the eight posts will be, with each spaced a metre apart around the perimeter.

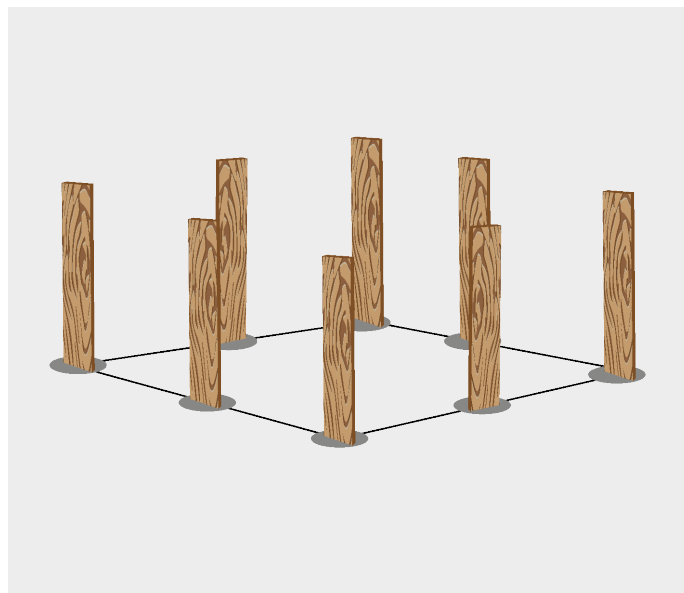




## Step 2: erect the posts

Dig out eight holes for the posts, each around 0.5m deep. Use the concrete mix to fill back the holes and carefully place a post in each.

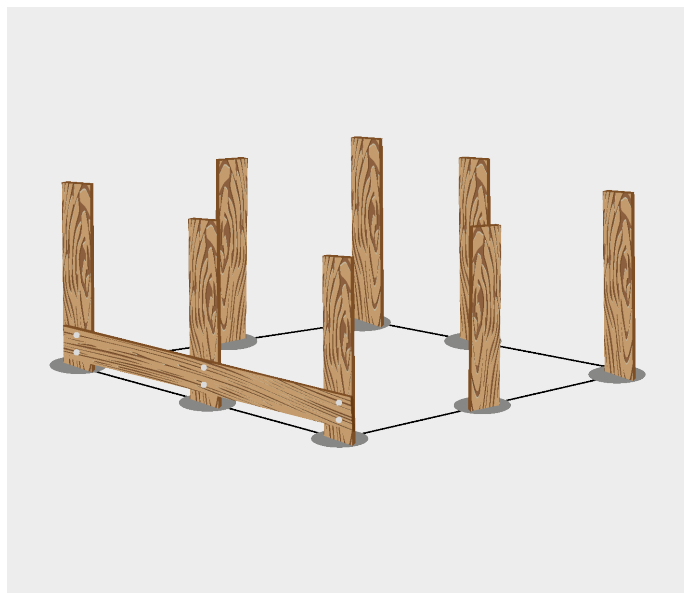
Use a spirit level to ensure the posts are perfectly horizontal to the ground and then leave to cure for 48 hours.



## Step 3: fix the sides

Begin attaching the first panel. Place the panel against one side of the compost bin and use two screws or nails to fix it to each post, using a manual or powered screwdriver.

Ensure the screws are positioned in the centre of the post and use your spirit level to ensure the panels are not at an angle.

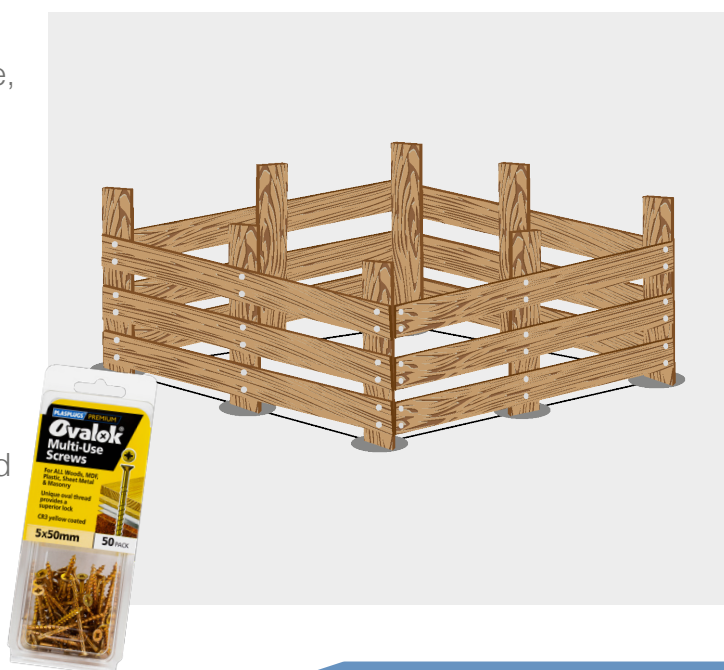


## Step 4: complete the compost bin

Repeat with the rest of the panels on each side, until they are three-boards high. It's a good idea to leave space between the boards, as this will help to help aerate the compost. And there you have it, your very own compost bin!

### Top tip:

Using screws or galvanised nails is personal preference, and both have their merits. Plasplugs Ovalok Screws securely clamp wood together, preventing any loosening over time. Whichever your preference, ensure they are fully inserted to ensure a tight hold.



# Repairing a wooden fence panel - intermediate

It's frustrating when a fence panel breaks or falls down, whether it's from storm damage or rot. This guide will help you to replace broken slats or rotted frames so that you don't have to replace the entire panel.

## What you'll need:

- Treated timber fence posts, usually 100mm x 100mm and cut to the height of your existing fence
- Treated timber fence panels in the length of your existing fence panel, typically 6ft
- Some string
- Drill driver, manual screwdriver or hammer depending on fixing
- Spirit level
- Shovel
- Hack saw
- Tape measure
- Premixed concrete
- 2 x packs of Plasplugs Ovalok Decking Screws or Plasplugs Galvanised Nails

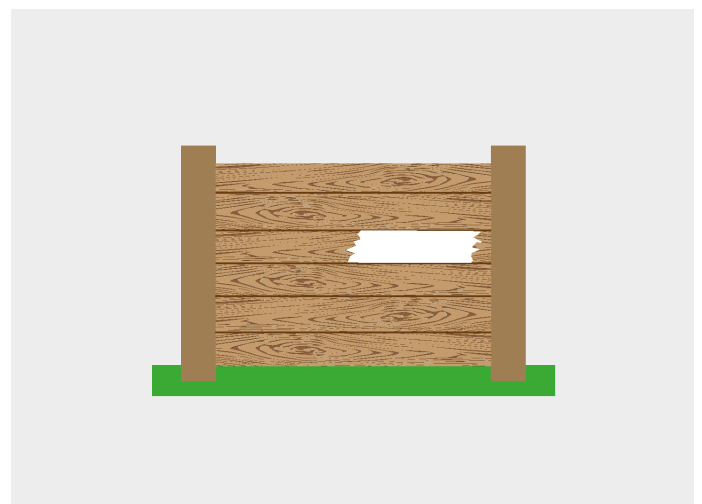
## Things to consider

- Never lay concrete below freezing
- Tell your neighbour that you are working on the fence
- It's safer and easier with two people for heavy lifting and levelling
- Always wear appropriate protective gear, including footwear
- Always wear gloves, goggles and a mask when mixing concrete
- Keep pets and children out the way
- Protect precious plants if you can
- Take care when operating tools and equipment
- Clean concrete off tools immediately

## Stages

### Step 1: check the post stability

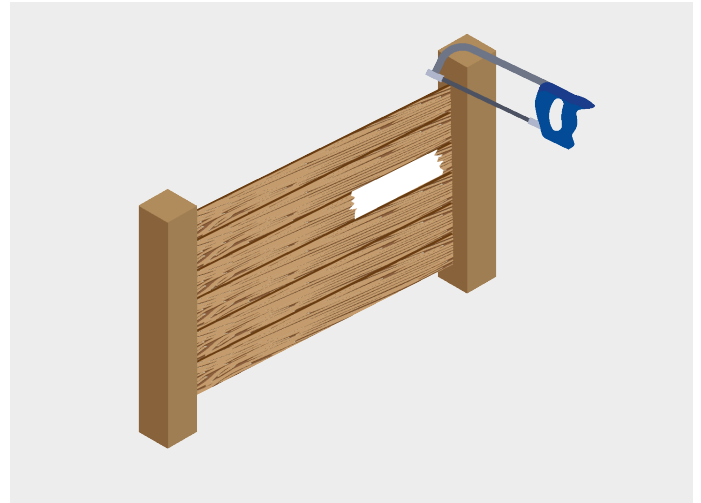
Start by determining whether the fence post is secure. Check the post's stability, and if you notice any excess movement or rot damage, you'll need to replace the post. If it is secure, you can jump to stage 6.



## Step 2: remove rotten or damaged wood

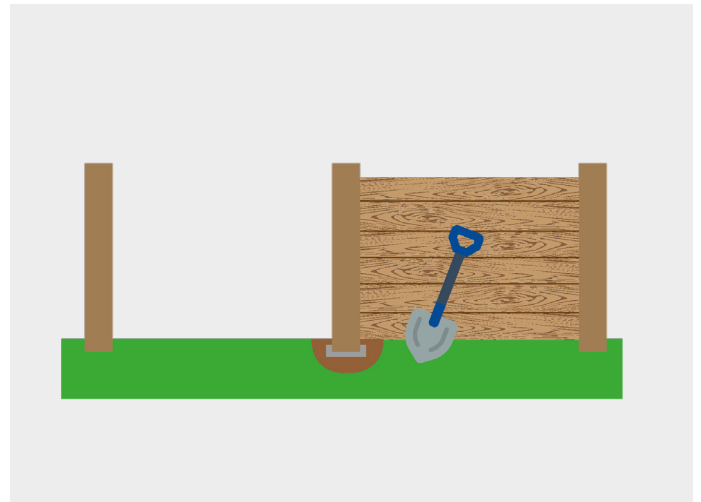
Remove the fence panel from between the posts. You need a hack saw to remove the securing nails between the post and panel, and always wear gloves when using a hack saw! Make sure you have removed the nails from either side of the panel.

Once the panel is loose, grab a partner to help by holding the one side of the panel while you pry away the other side. Move the panel away from your working area.



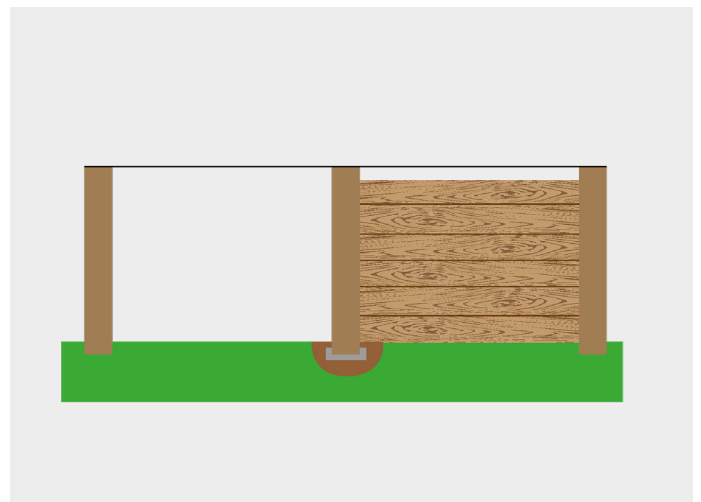
## Step 3: remove the old post

Now you need to remove the existing post by digging around the base. Once you've dug the hole and you can visibly see the concrete securing the post, wiggle it and lift. You should be able to remove the post from its place. If it is too heavy, ask a partner to help you.



## Step 4: dig a hole for the new post

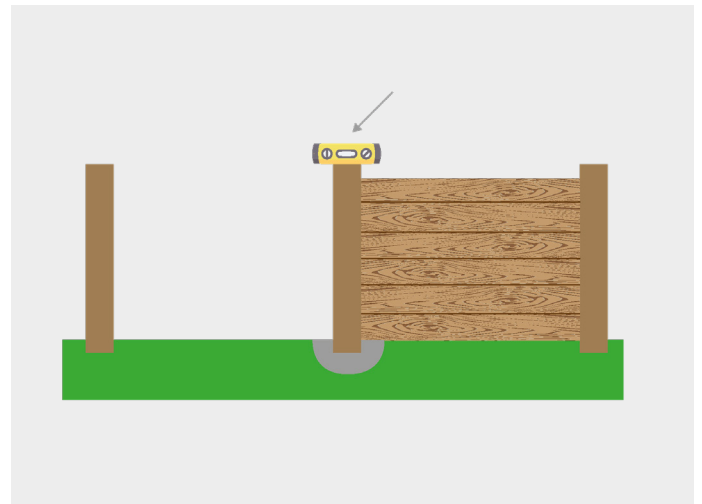
Using your string, hold it taut and stretch it across the top of the existing panels and posts. This gives you a guide to keep the new post and panel at a consistent level with the others. Now you need to make the post hole deep enough. For a 6-foot post, you need to have at least 450mm of depth to secure it.



### Step 5: concrete the new post

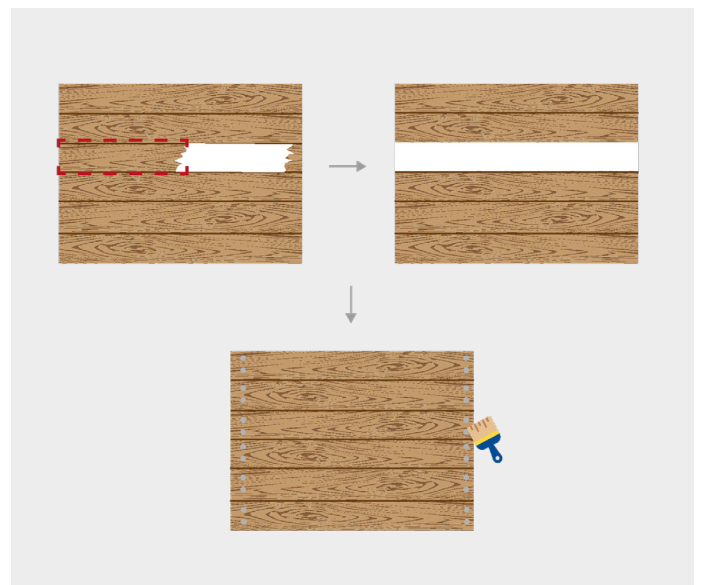
Place the new post into the hole and hammer your fence guidance posts into the ground to keep it in place. Keep checking your spirit level so that the post is vertical. Once the post is secured by the guidance posts, you can add your concrete to the hole.

Make sure you read the instructions of the concrete to ensure a strong hold. Use a trowel to level out the concrete. Then, make sure the post remains vertical with your spirit level during the concrete process, and leave for the allotted time.



### Step 6: fix the wooden panel

Remove the rotted or broken wood from the panel and ensure the areas above and below are still suitable. Grab your new pieces of wood and paint them in the desired colour, and then use galvanised nails to hammer them into place.

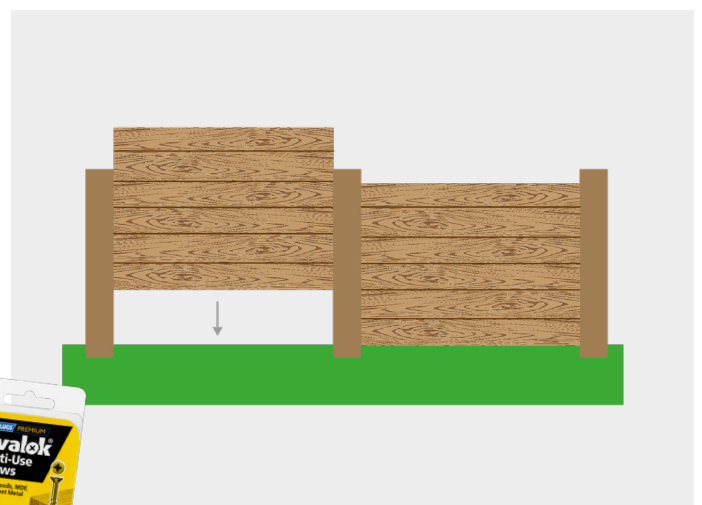


### Step 7: erect the new panel

Pick up the panel with a partner and slowly lower the panel into position. Using your screwdriver, insert holes into three areas of the panel, high, medium and low, to ensure consistent support of the panel. Now add your Plasplugs Ovalok Screws into the holes and secure in place.

#### Top tip:

Plasplugs Ovalok Screws are perfect for the outdoors because they have a protective coating, while Plasplugs Galvanised Nails are rust resistant.

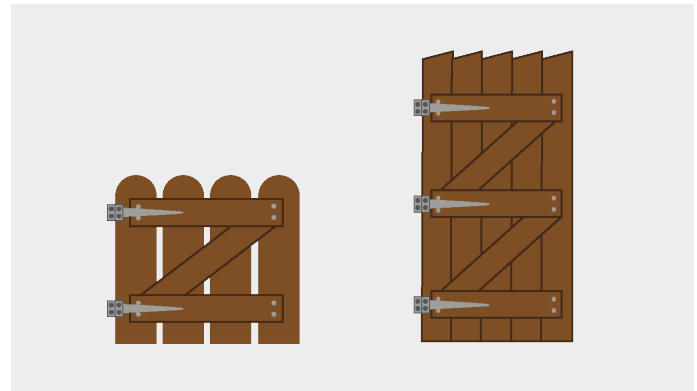


# Making a garden gate - advanced

Building a garden gate is a fantastic DIY project, and it's a job that's a whole lot easier than you might imagine. This guide will help you create a picket or feather edge gate that is perfect for your garden.

## What you'll need:

- If making a picket gate, 7 x lengths of treated sawn timber 125mm or 150mm wide and at the height of your choice, plus 3 additional planks (for horizontal frame)
- If making a feather edge gate, 11 x lengths of treated sawn timber 125mm or 150mm wide and at the height of your choice, plus 5 additional planks (for horizontal frame)
- 2 x treated timber posts 100mm x 100mm
- Gate handle and latch
- Post supports (to use while concrete dries)
- Approx. 50-100 pack Plasplugs Ovalok Decking Screws
- Cement mix
- Shovel
- Handsaw
- Tape measure
- Spirit level
- 2-4 hinges
- Screwdriver



Picket

Feather edge

## Things to consider

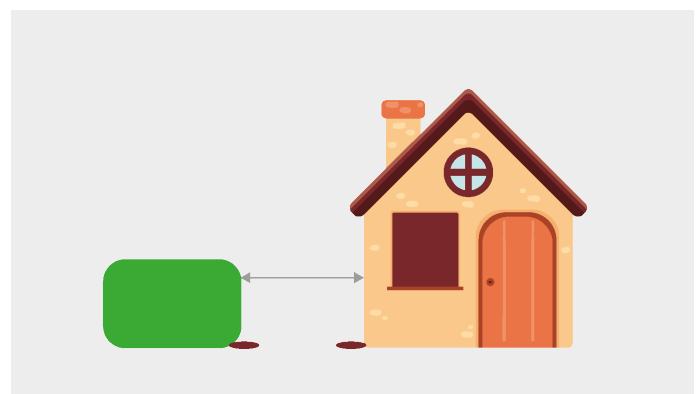
- Never lay concrete below freezing
- Always wear appropriate protective gear, including on your feet
- Always wear gloves, goggles and a mask when mixing concrete
- Use a partner to help with heavy lifting
- Take care when operating tools and equipment
- Clean concrete off tools immediately.

## Stages

### Step 1: pick a gate style

Start by deciding what kind of style gate you want, and if you want a feather edge or a picket gate. Cut your timber to size and paint the colour of your choice.

Measure the width of your gate opening and ensure it is on level ground. Deduct 25mm from your width to allow for the posts not being 100% level or swell in the timbers.

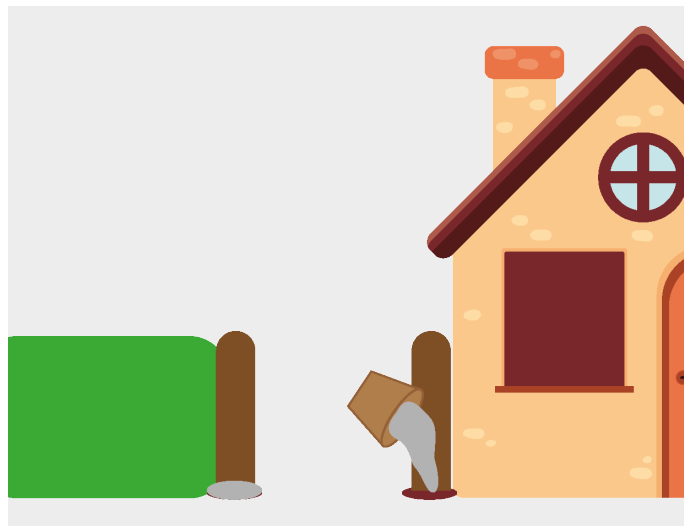




Once you have confirmed your position, dig a post hole at a depth of at least 400mm to keep secure and prevent movement.

### Step 2: place your gate posts

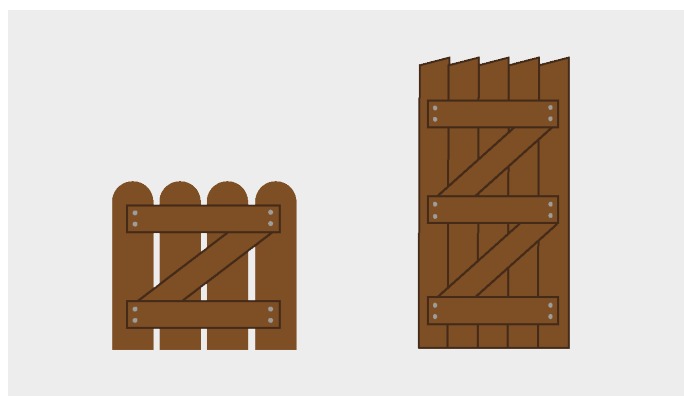
Place the gate post into the hole and secure in place by hammering your supports into the ground to keep it in the perfect position. Check the posts are parallel with a spirit level. Cement into place, following the manufacturer's instructions, allowing sufficient time for it to set.



### Step 3: build the gate

Allow for a minimum of 1cm each side of the post width to make room for hinge allowance and the swelling of the wood. For example, if the opening is 100cm, make the gate 98cm.

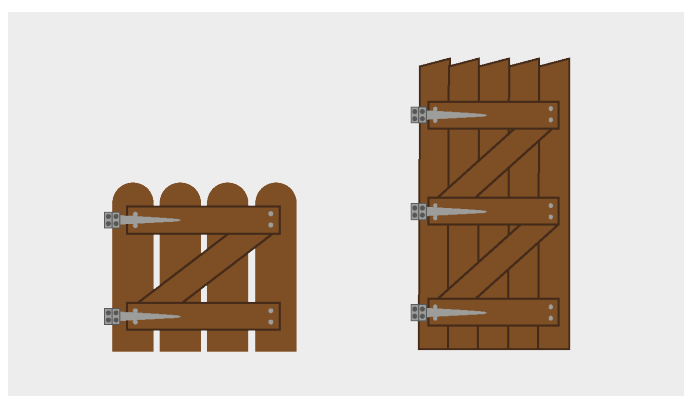
Assemble your wooden panels in your desired design and nail to the support frame. Ensure the support frame is evenly spaced at the top and bottom of the gate to spread the load. Use Plasplugs Ovalok Decking Screws to fix two screws where each panel meets the support frame.



### Step 4: fix the hinges

Now you can mark with a pencil the position of the hinges on the gate. Make sure the hinges are evenly spaced on the support frame to make it robust as possible.

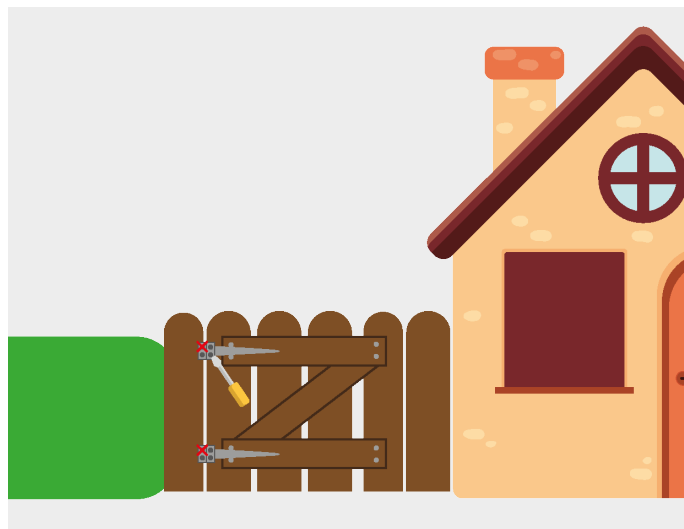
Make the hinges are flush against the wood and in a level position. Attach your hinge to the gate using your Plasplugs Ovalok Decking Screws.



### Step 5: attach the hinges to the post

Mark the hinge position on the posts. Use a spare plank of wood on the floor give the gate clearance and ensure it can open fully. Ask someone to help you rest the gate on top, using it as a stable support, and secure the hinges to the frame with the screws.

Remember to leave a small gap between the posts and the gate to allow for the hinge movement. Try fixing one screw in each hinge first to test the gate has clearance, before securing with the rest of the screws.

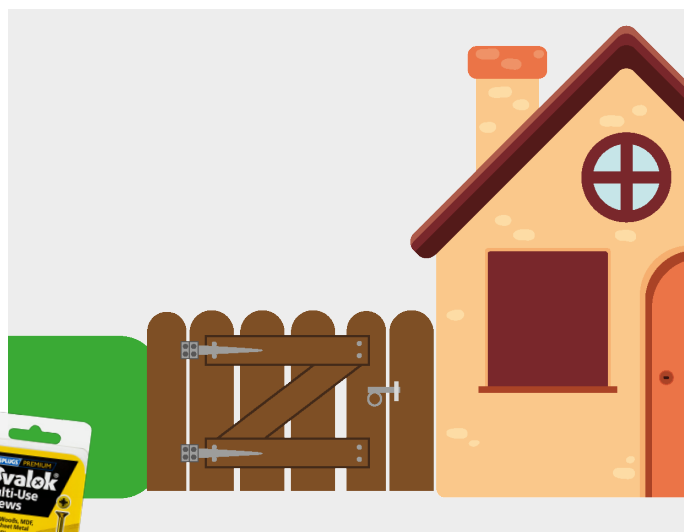


### Step 6: add the handle

Now it's time to add the handle. Decide what kind of latch you would like and fix it on following the manufacturer's instructions. Always make sure you to test the position of the handle before you put the final screws in place.

#### Top tip:

There's no need to pre-drill with Plasplugs Ovalok Decking Screws, making it a much faster and safer job!



# Installing a wooden shed - advanced

The mighty shed is a staple of any British garden. From green thumbs looking for a place to do their potting, to providing extra storage space or even creating a secret hideaway: the possibilities are endless! Constructing your own shed is a real achievement and a great way to save money. It may take a bit of extra effort to put together, but a well-constructed shed will last for years.

## What you'll need:

- Flat pack shed kit
- 1 x 50 pack of Ovalok Deck Screws 4.5 x 40mm
- Hammer
- Power drill
- Tape measure
- Spirit level
- A helping hand

## Things to consider

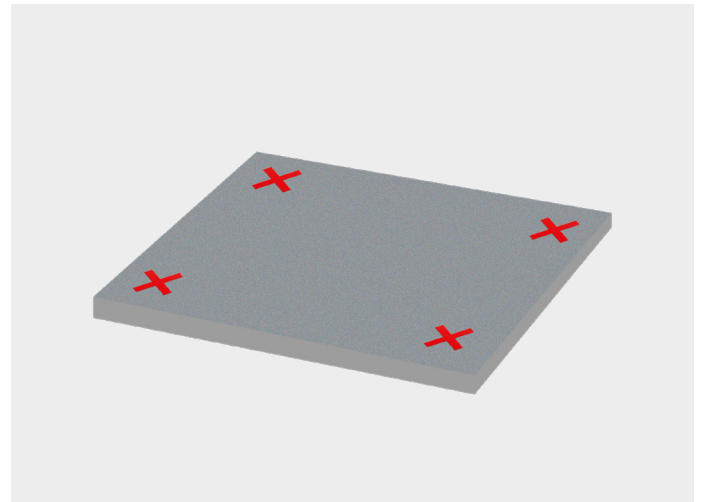
- You'll need a spacious, level area in your garden
- Before using tools, ensure they're in good condition and that there's no damage to the electrical cord
- When using a sharp blade, always cut away from you
- Turn off drills before fixing accessories
- Wear gloves, eye protection and appropriate footwear when using power tools

## Stages

### Step 1: create a base

Clear an area for your shed in a level part of your garden. It's very important to construct your shed on a solid base, such as concrete or paving slabs, to prevent warping or rotting in the future.

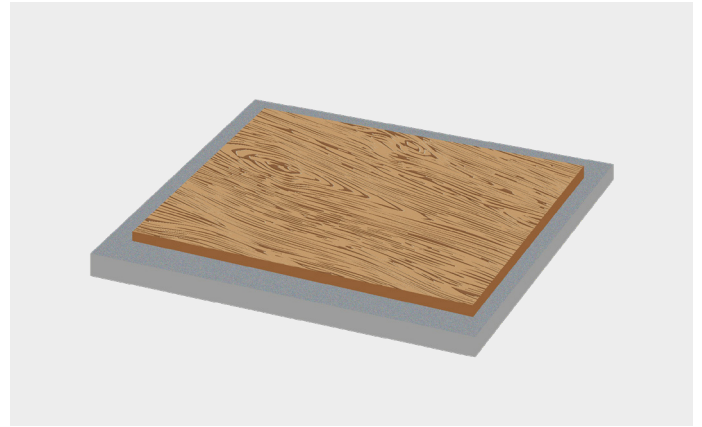
Mark out a space using the shed dimensions, allowing some extra room (ideally a minimum of 60cm) around the sides for maintenance.



## Step 2: lay the floor

Lay the base of the shed onto the prepared surface and use a spirit level to check it is perfectly flat.

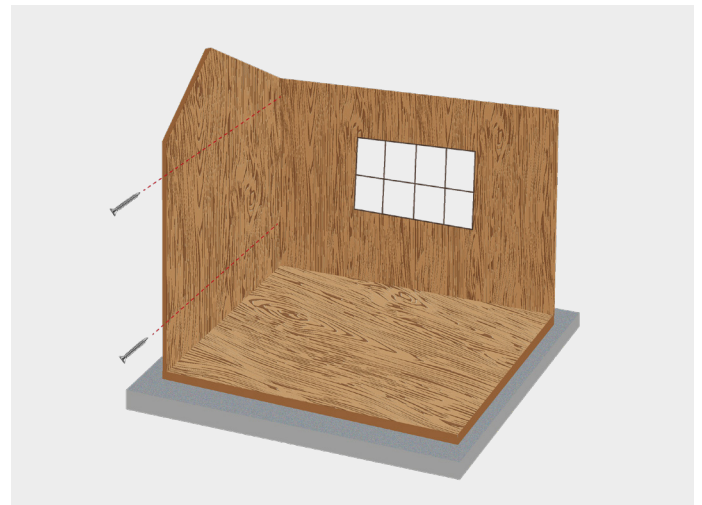
This is a crucial step and one that should be repeated throughout construction, as the shed will not fit together otherwise!



## Step 3: erect the shed sides

Once you are happy the base is level, you can start erecting the walls. Take the end section without the door and place on the back end of the base aligning it to the edge.

At this stage you will need a willing volunteer to hold this steady while you lift one of the long side panels onto the base, running 90 degrees to the end panel.



## Step 4: secure the walls

Once the walls butt together in the corner, you can join the two sections by screwing through the frame. Screw these together on the inside of the shed.

At this point you can also screw the bottom of the walls into the base at 50cm spaces. Repeat the above process until all the walls are erected.

A 3D perspective illustration showing the shed's walls being secured together. The end wall and side wall are joined at the corner. A window with a 3x2 grid pattern is visible on the end wall. A screw is shown being driven through the corner joint. Another window with a 3x2 grid pattern is visible on the side wall.

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## Step 5: add the roof

You are now ready to add the roof, which you will need a volunteer to help you with. Carefully lower roof onto shed frame, ensuring it is located correctly.

Once in place screw onto frame at each corner and along walls at 50cm apart.



### Top tip:

Plasplugs Ovalok Deck screws are the perfect outdoor screw thanks to their superior lock which holds stronger and longer. They start easily and also prevent 'lifting' on insertion. They also have an additional coating to cope with the British weather!

