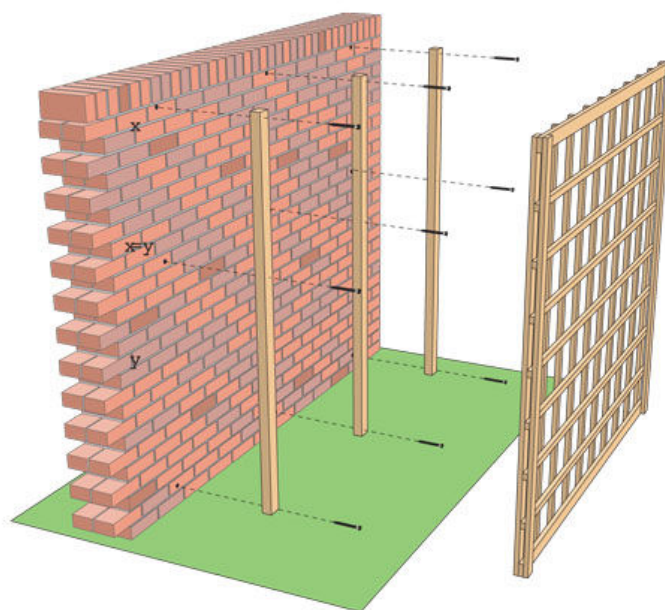
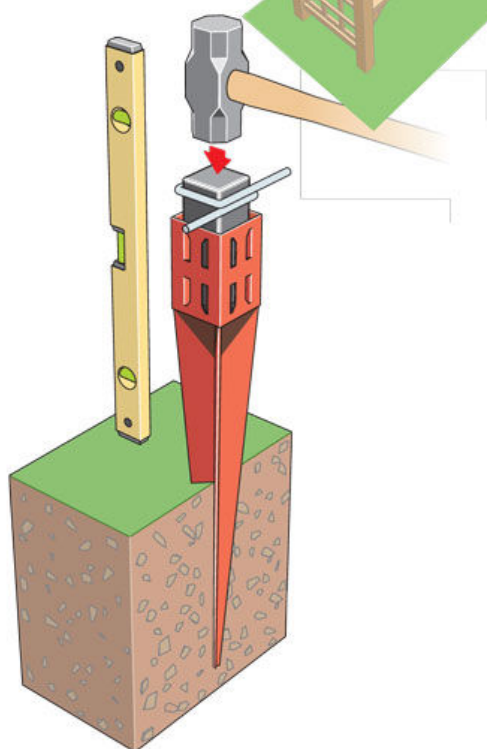
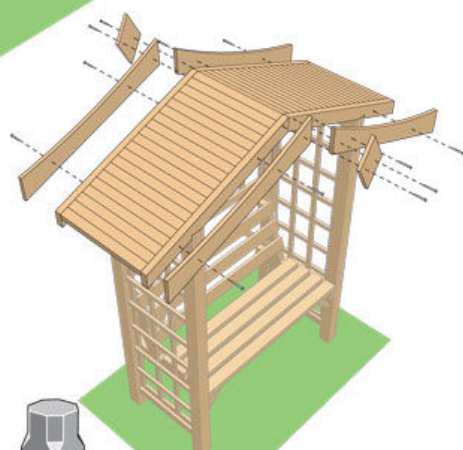
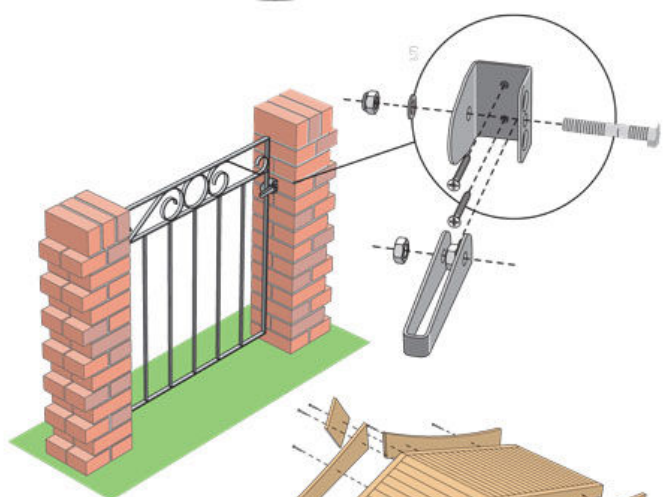




A series of easy to follow step-by-step guides to help you with all sorts of garden projects from erecting fence panels and pergolas to building raised beds and completing various landscaping projects.



### 'How to' Harry Guide Contents

How to build a Composter	2
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Harry's guide to Landscaping	7
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How to Build a Pergola	11
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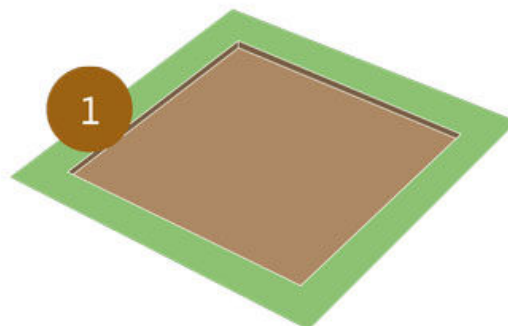
# How To Build A Composter

Using a composter to make your own compost saves time and money and, if you want to 'grow your own', there's no better place to start. Compost improves low quality soils by adding organic matter and nutrients, and plants grown in good soil are healthier with a greater resistance to diseases and insects.

Grange has a range of composters to cover all sizes of garden. All of them are quick and easy to assemble.

## Ground Preparation

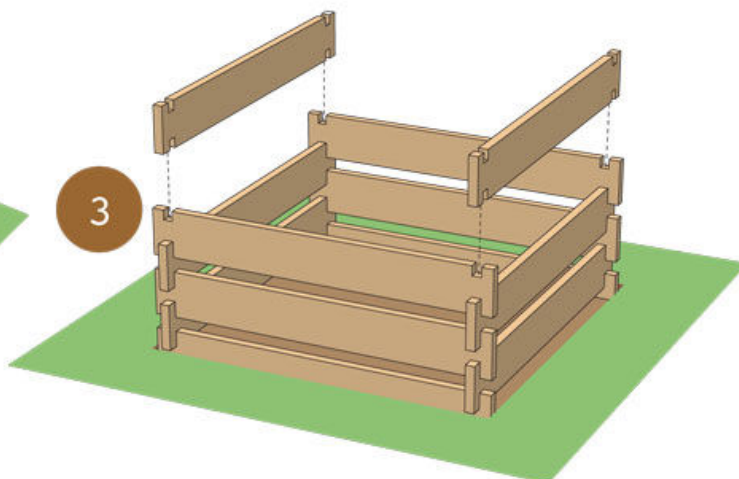
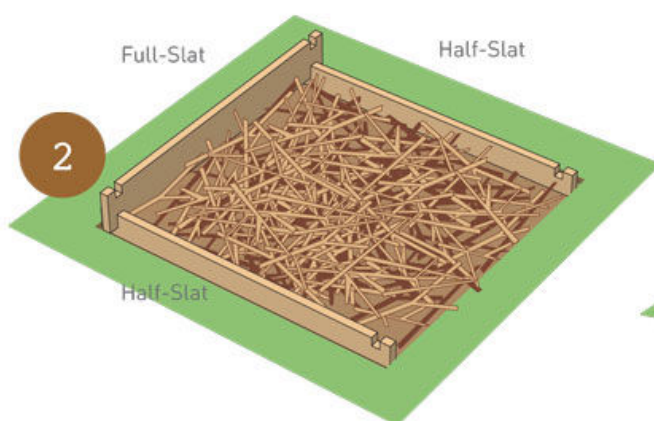
Decide where your composter is to be sited. The area needs to be level and it is preferable for the ground to be forked over before commencing assembly.



## Assembling Your Composter

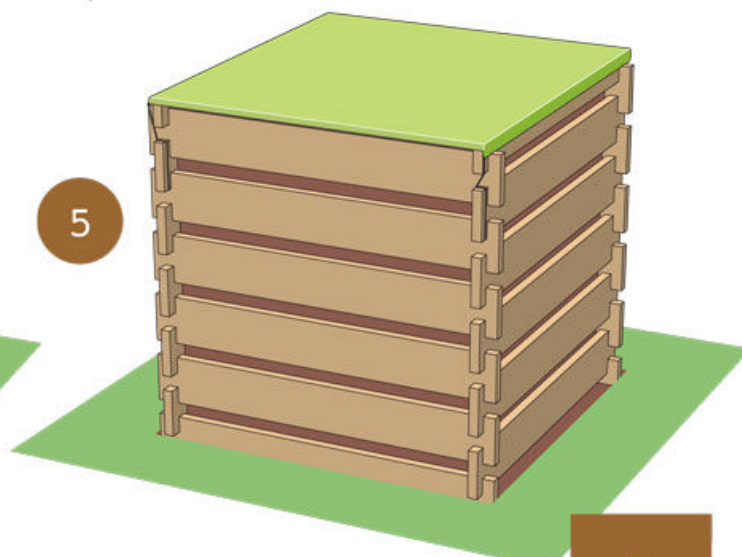
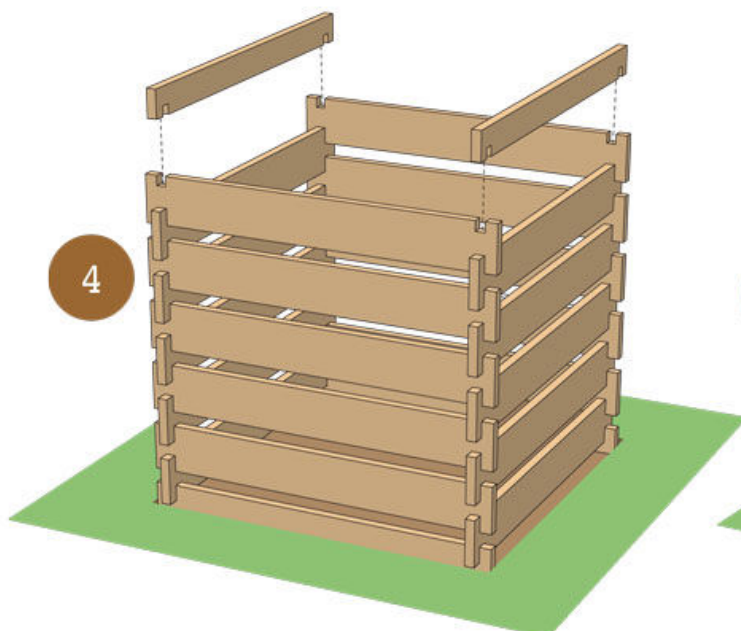
Place two of the smaller half-slats on the soil as shown. Insert one of the full slats into the cutouts at either end to form a square base. Add a layer of straw or twigs 100mm thick to aid circulation.

Continue adding full slats to the assembly, building up the sides.



Finally, put the two remaining half-slats into position to complete the assembly.

A composter relies on heat generation to create compost and moisture is also vital to this process. It is important therefore to retain heat, prevent the compost from drying out but also to prevent it from becoming water-logged. A composter cover will help prevent all of these conditions. Grange offers a cover for all sizes of composter.







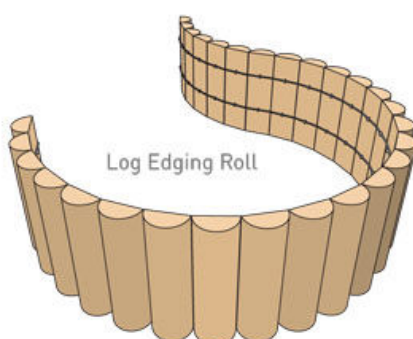
# How To Fit Log Edging

Log edging comes in various forms and is used to 'finish' and dress a section of garden. Grange supply two main types: fixed straight boards for when long straight runs are required and flexible edging rolls suitable for curved areas. Both types come in a variety of forms.

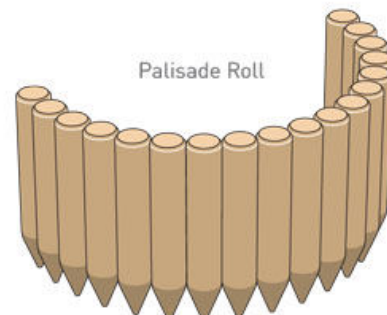
## Log Roll

As the name suggests, this form of edging is flexible and takes the form of half-round or full round logs, held together with steel wire.

Particularly suitable for curved borders or irregularly shaped garden areas, log roll is generally supplied in an easy-to-carry roll.



Log Edging Roll

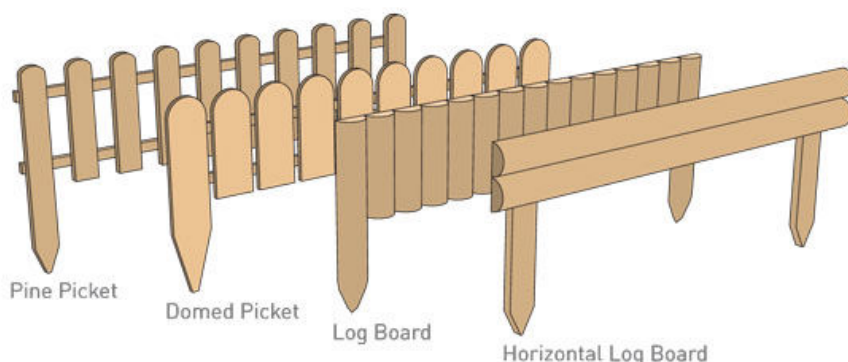


Palisade Roll

## Log Board

Log Board is supplied in rigid shorter lengths and provides a straight edge where a long run is required. They can also be used for small retaining work.

All our log boards have integral spikes which means they can be driven directly into the ground.



Pine Picket

Domed Picket

Log Board

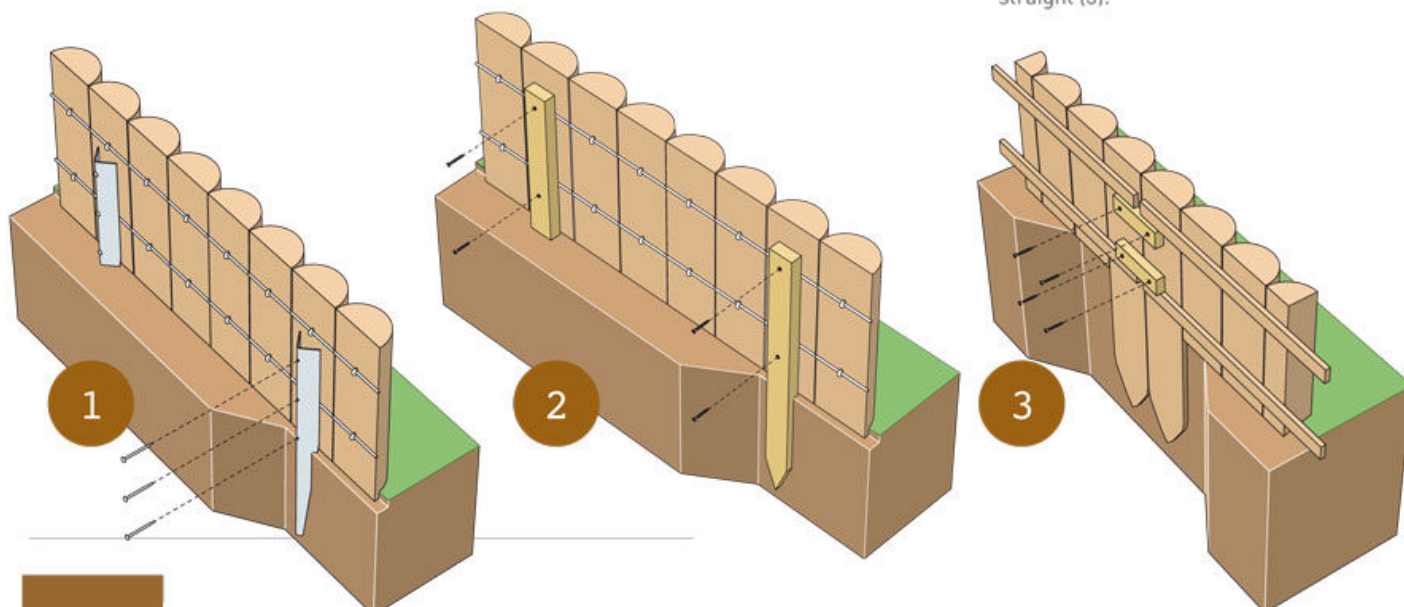
Horizontal Log Board

## Log Board

Grange supply both timber stakes and metal Metpins to secure Log Edging Roll to the ground. Metpins are fixed to the back of the log edging using galvanised nails driven through the pre-drilled holes in the Metpin [1].

Timber stakes are driven into the ground and the edging roll is fixed to them using two screws to go through the stake into the log [2].

Drive Log Boards directly into the ground, alternating between each end when hammering in and use a spare piece of timber to protect the top of the board from the hammer. Screw small lengths of timber to the ends of the boards to act as braces and keep them straight [3].



1

2

3

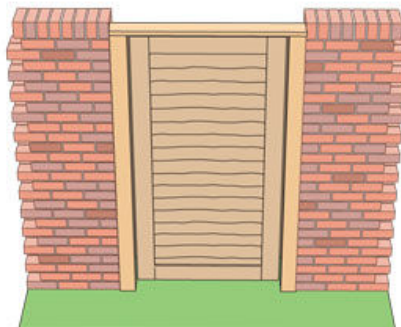
3



# How To Hang A Timber Gate

Gates usually provide a dual function. To restrict access to certain areas or to keep in children and/or pets. Grange offers a wide range of both 6' and 3' high gates.

The choice depends on your specific requirements but the basic installation methods will be the same, whatever style you choose.



## Tools Required

- Tape measure
- Power drill
- Spirit level

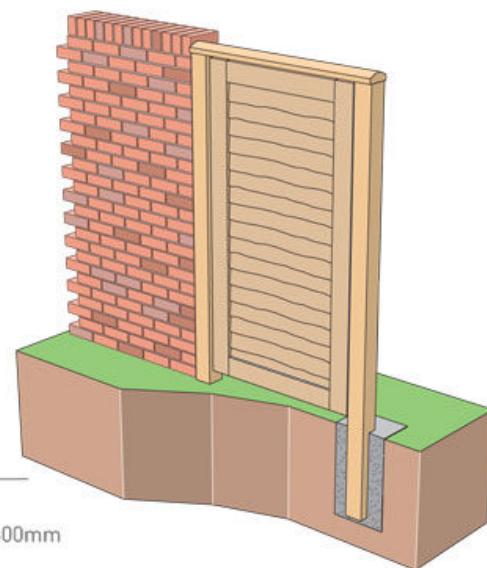
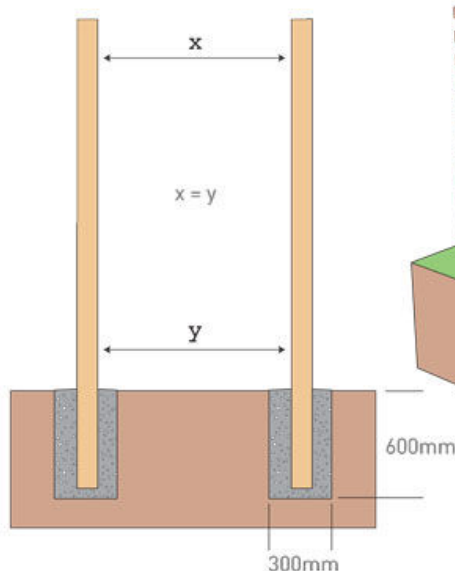
## Measuring for a timber gate

When measuring for a gate remember to add the two post sizes to the gate size and a further 20mm overall spacing to allow the gate to freely open and close.

Free standing posts for 6' gates should be at least 100 x 100mm (4" x 4"). Supported posts, either with a top cross member or at the sides, may be smaller. If using a top cross member, it should be at least 2m (6' 6") off ground level.

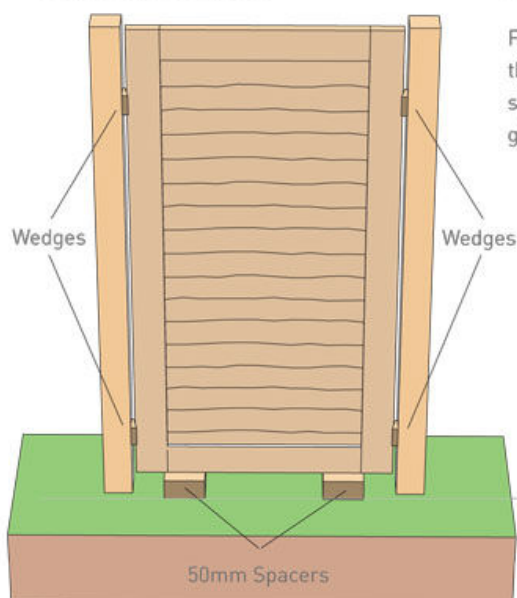
The hole size for each post should be 600mm deep and 300mm wide. Concrete in the posts with MetCrete or a similar post fix concrete.

Posts may also be fixed to an existing wall. Ensure the posts are vertically parallel before attempting to fit the gate.



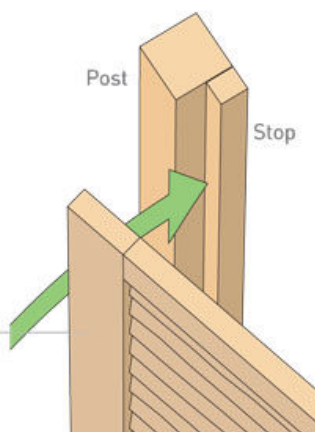
## Fitting the gate

Position the gate between the posts and place some 50mm packers under it. Allow for any unevenness in the ground when the gate is opened.



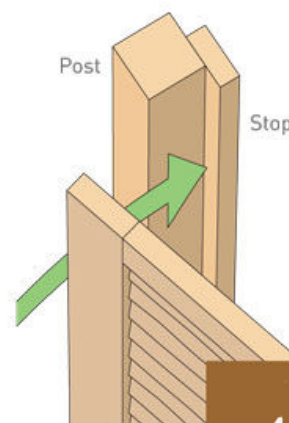
Now place wedges either side of the gate to even out the gaps either side and to hold the gate in place while fitting the hinges [3].

Fit the hinges, taking care to ensure that the gate opens as intended. Remove all spacers and wedges and check that the gate swings freely.



Fit the latch to the gate at the preferred height and in a position where the gate can support the screws. Fit the keep to the post.

Finally, fit a gate stop to the frame/post to protect the hinges and latch from damage.





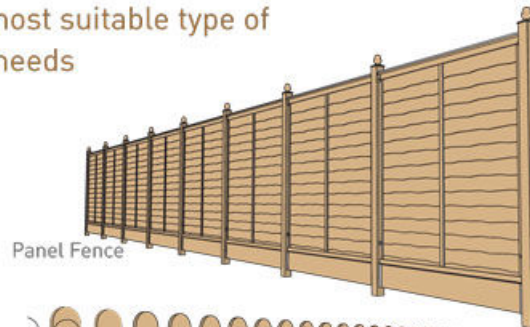


# How To Put Up A Fence

Choosing the most suitable type of fence for your needs

## Panel Fences Uses

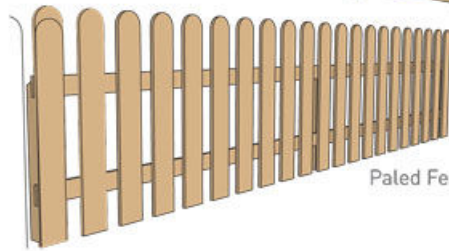
- privacy
- marking boundaries
- screening unsightly areas



Panel Fence

## Paled Fences Uses

- marking boundaries
- decorative boundaries



Paled Fence

Whatever type you choose, the basic installation techniques are the same.

## Tools Required

- Tape measure
- Spade
- Saw
- Power drill
- Spirit level
- Hammer
- Pencil
- String Line

## Materials Required

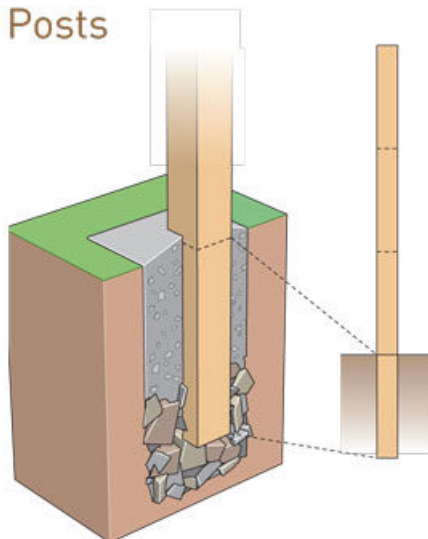
Will depend on the type of fence and type of installation you decide upon. See below for the basic requirements.

## Installing Your Posts

### Installing posts directly into the ground

If the posts are to be installed directly into the ground ensure that 1/4 of the total height of the post is below ground level.

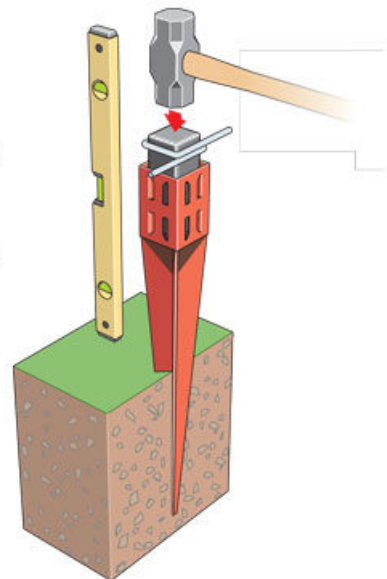
Hardcore or brick rubble can be used to fill the bottom of the hole. Top off the hole with a concrete mix such as **MetCrete**.



### Installing posts using Metpost post support spikes

Using a Metpost Driving Tool and a sledgehammer, drive the spike into the ground using short firm strokes. Regularly check the vertical alignment using a spirit level.

*NB. when using spikes take care to avoid underground services.*



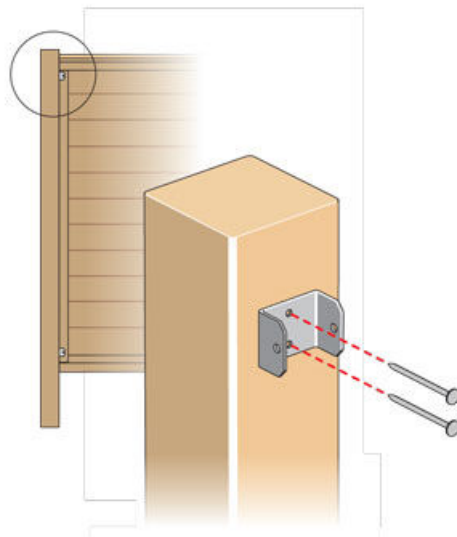
## Installing Your Fence

### Installing fence panels

Attach **Metclips** to the post using galvanised nails.

Locate a panel into the Metclips and attach also using galvanised nails.

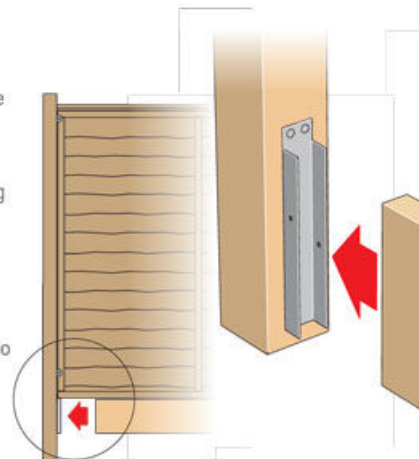
Install another post at the end of the panel and continue in this way until the fence is complete.



### Fitting gravel boards

All timber panels should be isolated from ground level to avoid rot. Gravel boards are used to fill the resulting gaps on both level and sloping fences

Use **Metpost Gravel Board Clips** to attach the boards to the posts as shown.



# HOW TO PUT UP A FENCE

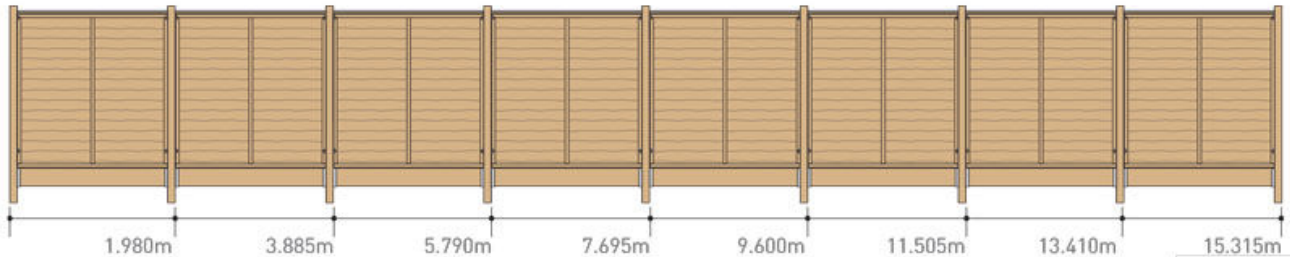
## Planning your fence

Install your first post using one of the fixing methods shown previously.  
Attach a string line to the post, take to the furthest position in the run, and fix in place.

The diagram below uses standard 1.83m wide x 1.8m high panels and 75mm posts.  
Where a dimension falls short of the sizes shown below, a reduced size panel will be required. The method for reducing the size of a panel is shown in Harry's Tip (below).



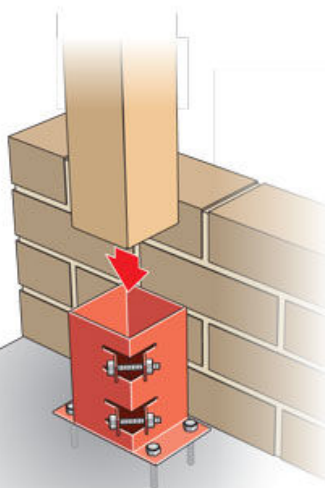
Plan for any reduced size panels to be situated at the remotest part of the fence.



### Installing posts using Metpost bolt down supports

Ideal for use on existing concrete areas, patios and decks. Its flush fit design also allows for use on or directly against walls.  
To install, use the Bolt Down as a template to mark holes for drilling then secure to the surface using four Metpost Anchor Bolts.

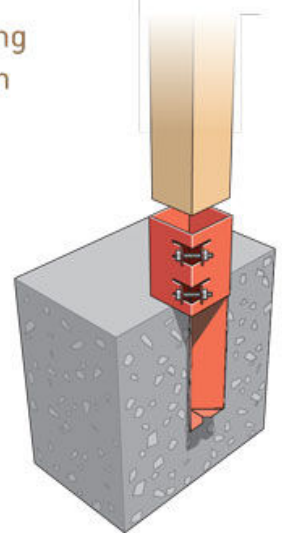
NB. the Bolt Down is not recommended for use on tarmac.



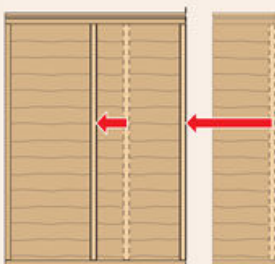
### Installing posts using Metpost concrete-in post supports

Using a Metpost Driving Tool and a sledgehammer, drive the spike into the ground using short firm strokes. Regularly check the vertical alignment using a spirit level.

NB. when using spikes take care to avoid underground services.



Fit the last post in the run, measure the gap, cut the final panel to fit.

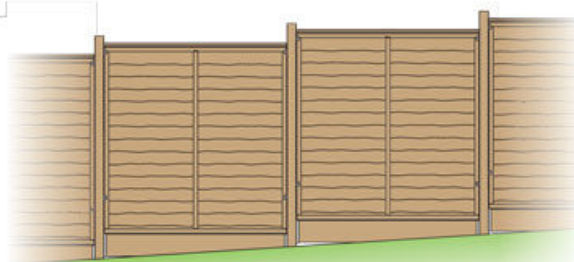


Cut and re-position vertical struts as shown

### Sloping Fences

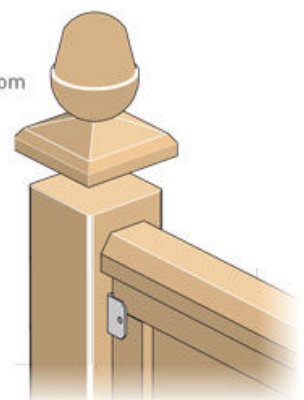
Fences on a sloping ground need to step-up in relation to the slope.

Ensure that the post length accounts for the step and fit gravel boards to fill any large gaps at the base.



### Finishing Touches

Attach a post cap or finial to the top of each post for a professional touch and to protect the top of the post from weather.







# Harry's Guide To Landscaping

## Sleepers

Wooden sleepers have a great many landscaping applications, from building a raised bed to creating steps and retaining walls. We carry an extensive range of garden sleepers and are confident that we have the right product to suit your particular project.

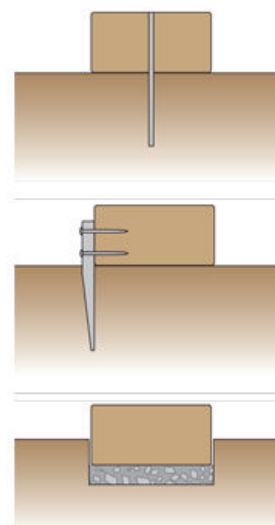
Harry has come up with some easy, step-by-step instructions for a couple of his favourite projects, but if you have something else in mind, don't be afraid to be creative, the basic fixing and fastening methods are the same.

Check out our Landscaping product pages for the full range of sleepers available (page 35).

## Fixing Sleepers

There are three main methods for securely attaching sleepers to the ground.

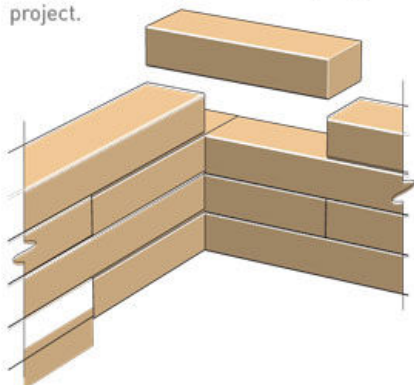
1. Pre-drill the sleeper and insert a metal rod to (at least) the depth of the sleeper.
2. Screw-fix a metal log roll pin or wooden stake - one to each end of the sleeper.
3. Dig a 75mm deep trench and use MetCrete to provide a base 25 - 30mm deep.



## Building and fastening

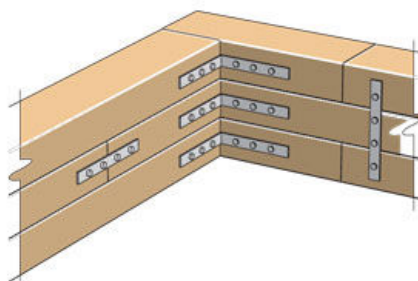
### Building

Build corners and walls using the coursing method as shown below. This will provide strength and stability to your project.

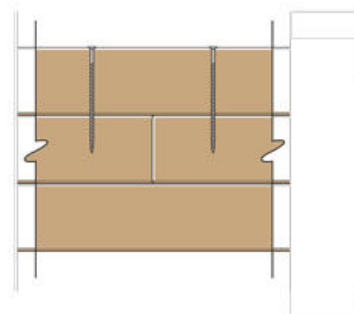


### Fastening

For walls, fasten the sleepers together with Grange Straight Landscape Connectors. At corners use Grange Angle Landscape Connectors.



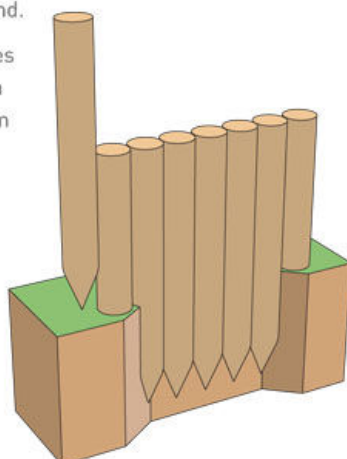
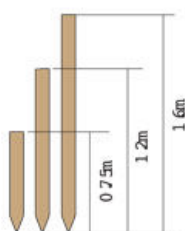
Alternatively, fasten the sleepers together with good quality screws. Each screw should penetrate the lower sleeper to at least half its depth.



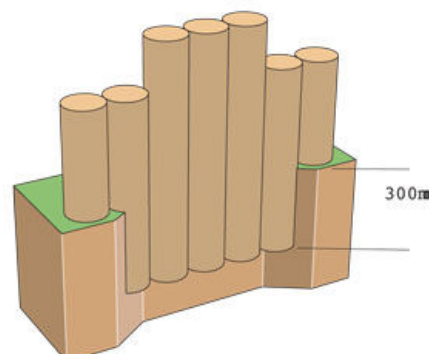
## Landscaping poles and bollards

**Landscaping poles** are available in three sizes and can be used to create different levels. A point at one end of the pole allows them to be driven directly into the ground.

For retaining applications the poles should be driven into the ground a minimum of 300mm. Up to 600mm for the longer landscape pole.



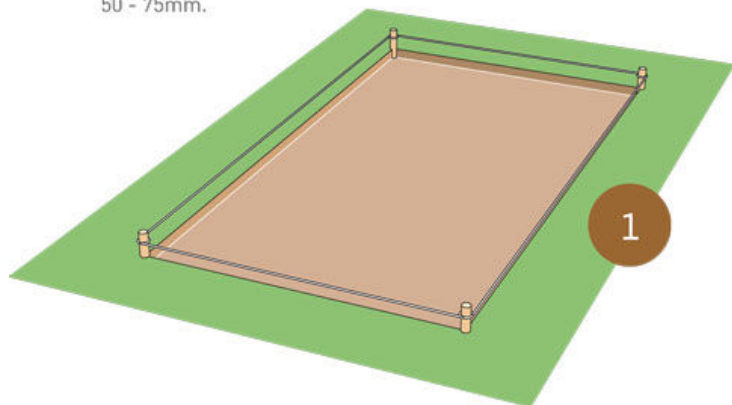
**Bollards** have a bigger diameter than landscape poles and are not pointed at the end. They may be cut down to provide a variation in height. They should be sunk into the ground a minimum of 300mm to provide stability and may be strengthened by using MetCrete at their base. When used as a retaining wall, a minimum of 600mm should be set below ground into a concrete foundation.



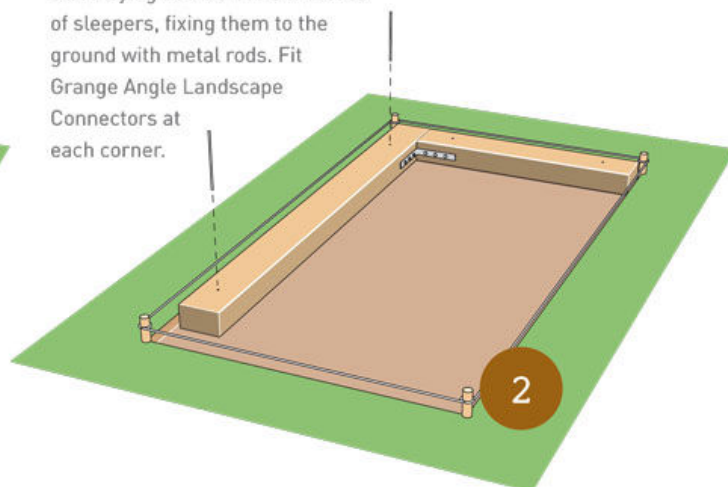
## HARRY'S GUIDE TO LANDSCAPING

### Project 1 - Build a raised bed

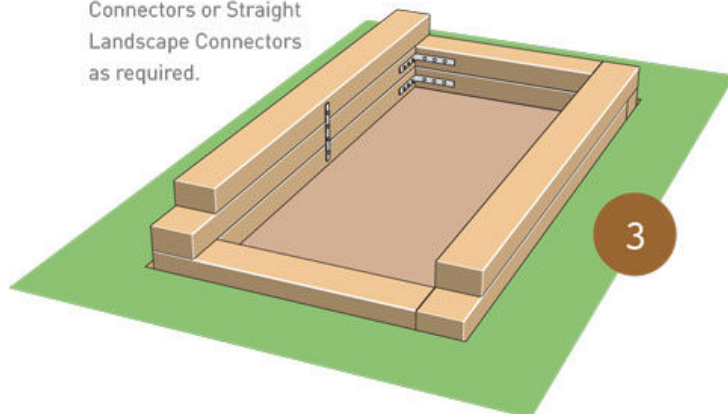
Using stakes and a string line, mark out the area of your raised bed. Dig out area of bed to depth of 50 - 75mm.



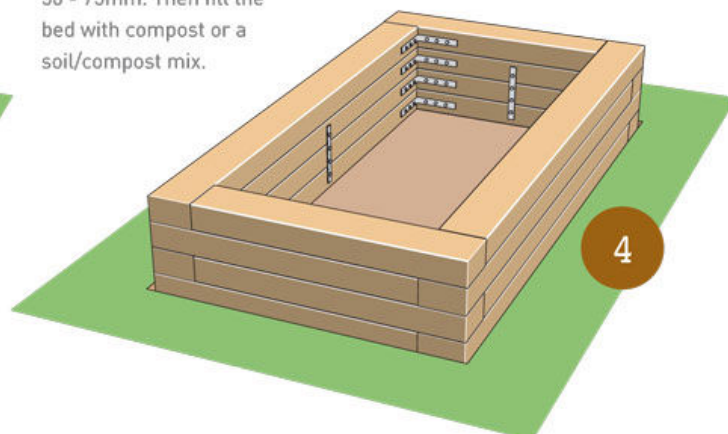
Start laying out the bottom course of sleepers, fixing them to the ground with metal rods. Fit Grange Angle Landscape Connectors at each corner.



Continue laying your sleepers using the coursing method described above. Fit Grange Angle Landscape Connectors or Straight Landscape Connectors as required.



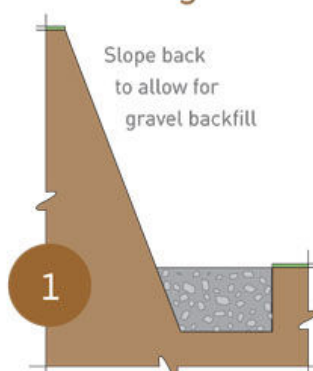
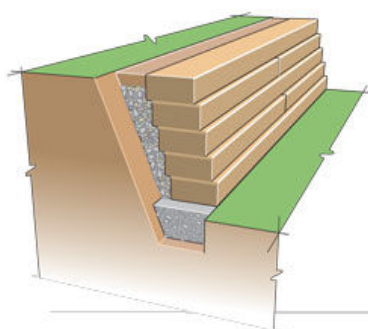
To aid drainage, fill the base with hardcore to a depth of 50 - 75mm. Then fill the bed with compost or a soil/compost mix.



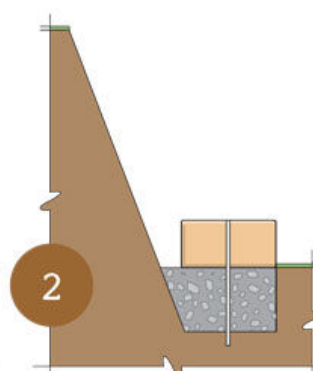
### Project 2 - Build a retaining wall

Sleepers may be used vertically or horizontally when building a retaining wall. Horizontally laid sleepers are recommended for low level walls.

It is vital to use the coursing method described above in order to strengthen your wall and maintain its integrity.

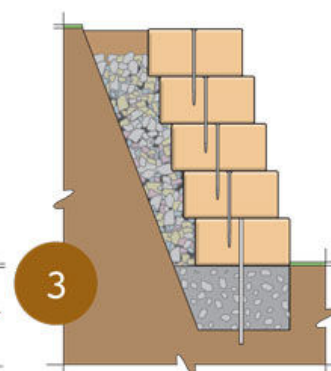


Prepare a 50mm deep footing for your wall using a sand and cement mortar mix.



Lay the first course of sleepers and fix by inserting metal rods through pre-drilled holes into the footings as shown above.

Continue building to the top. Maintain the 25mm step-back and ensure all sleepers are firmly fixed to the ones below.



Lay the second course on top of the first, setting it back 25mm from the front. Fix firmly to the lower course using screws.

Backfill with gravel to aid drainage. Top off with a layer of soil.





# How To Hang A Metal Gate

Metal gates provide good security as well as adding to the appearance of your property.

Metpost gates are offered in varying widths and heights. A bespoke service is available through your stockist. Please ask for details.

## Tools Required Fittings required

- Tape measure
- Spirit level
- Power drill
- Masonry bit
- Wall plugs & screws

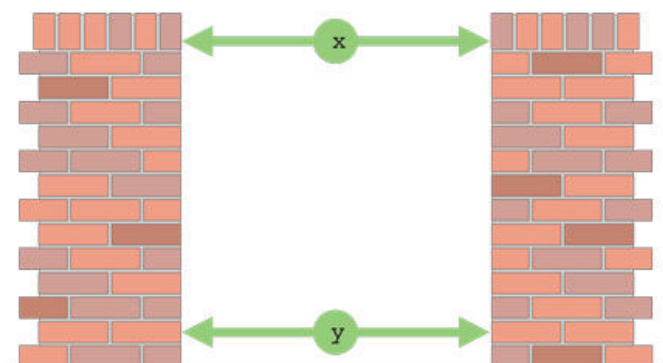
All Metpost gates include all relevant fixings.

## Measuring for a metal gate

Measuring for metal gates differs from a timber gate in that the size quoted includes the fittings for the gate. When using metal posts these will also have to be added to the gate width. Measure the gap at top and bottom then select the size of gate required. Metpost Metal Gates come in 3 widths to fit the following gaps:

Gate Width:	To fit openings of:
770mm	825 – 900mm
810mm	900 – 975mm
840mm	900 – 975mm

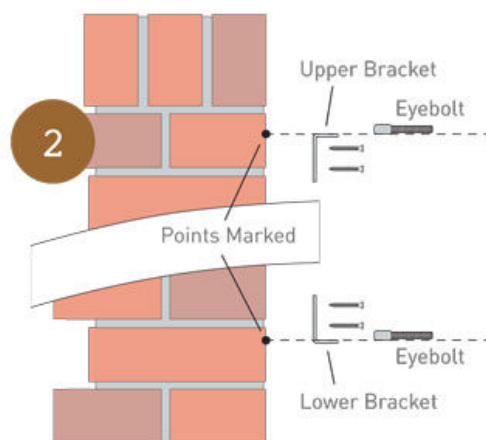
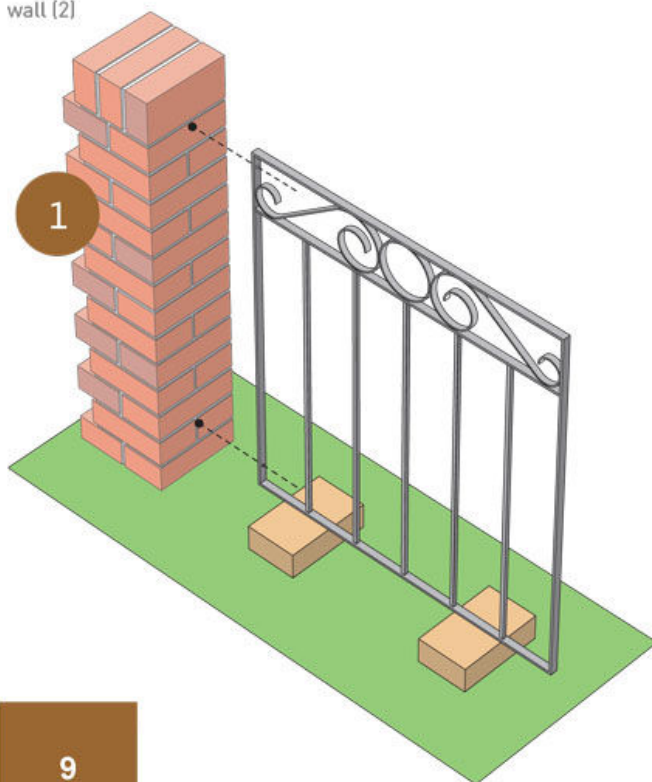
Alternatively Metpost offer a made to measure service. Please ask your stockist for details.



## Fitting the gate

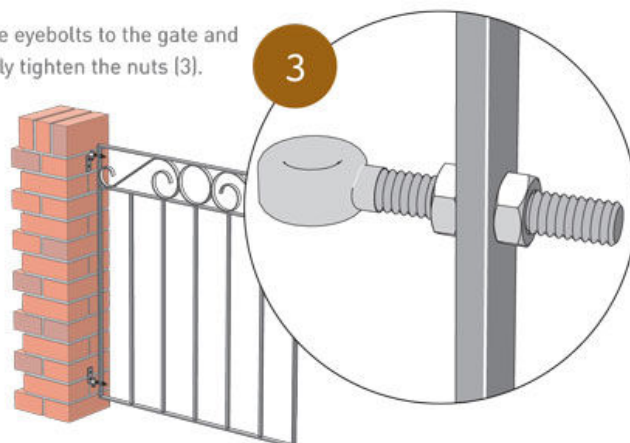
Raise the gate off the ground by approximately 50mm. Use two spacers for this and support in position. Use the holes in the gate to mark the wall where the gate is to be fixed (1).

The eyebolts used as the hinges are fixed on the top face of the wall brackets. When fixing the brackets to the wall, the face in contact with the eyebolt should be level with the points marked on the wall (2).



Fix the hinge brackets to the wall using the screws supplied in the fixing pack. If fitting the gate to metal posts, use the self-tapping screws supplied for this. Note the reverse orientation of the top and bottom brackets.

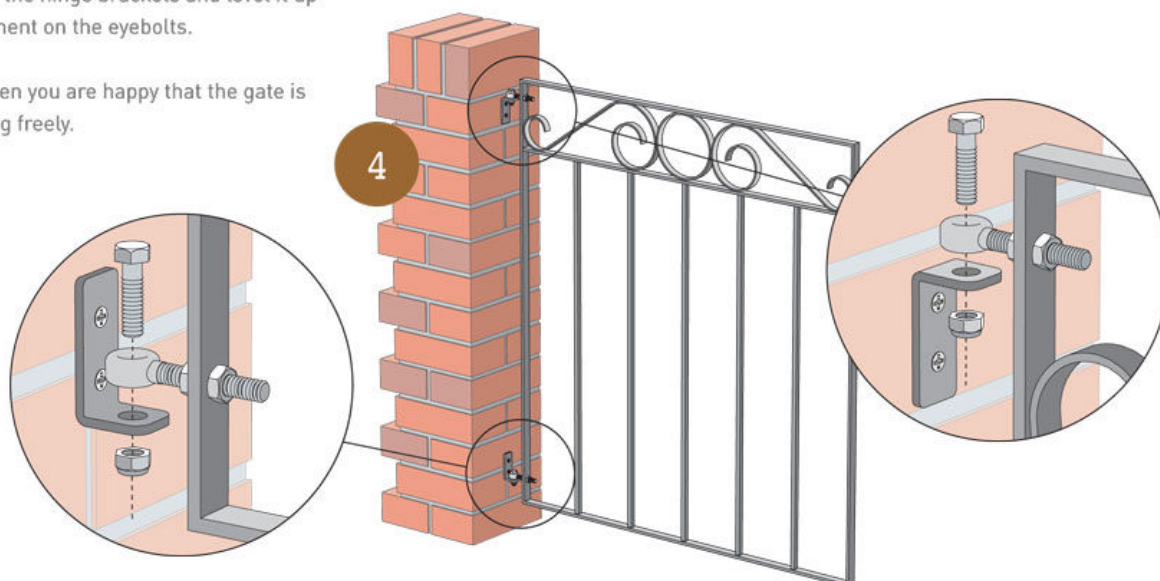
Fit the eyebolts to the gate and loosely tighten the nuts (3).



## HOW TO HANG A METAL GATE

Hang the gate on the hinge brackets and level it up using the adjustment on the eyebolts.

Lock the nuts when you are happy that the gate is level and swinging freely.

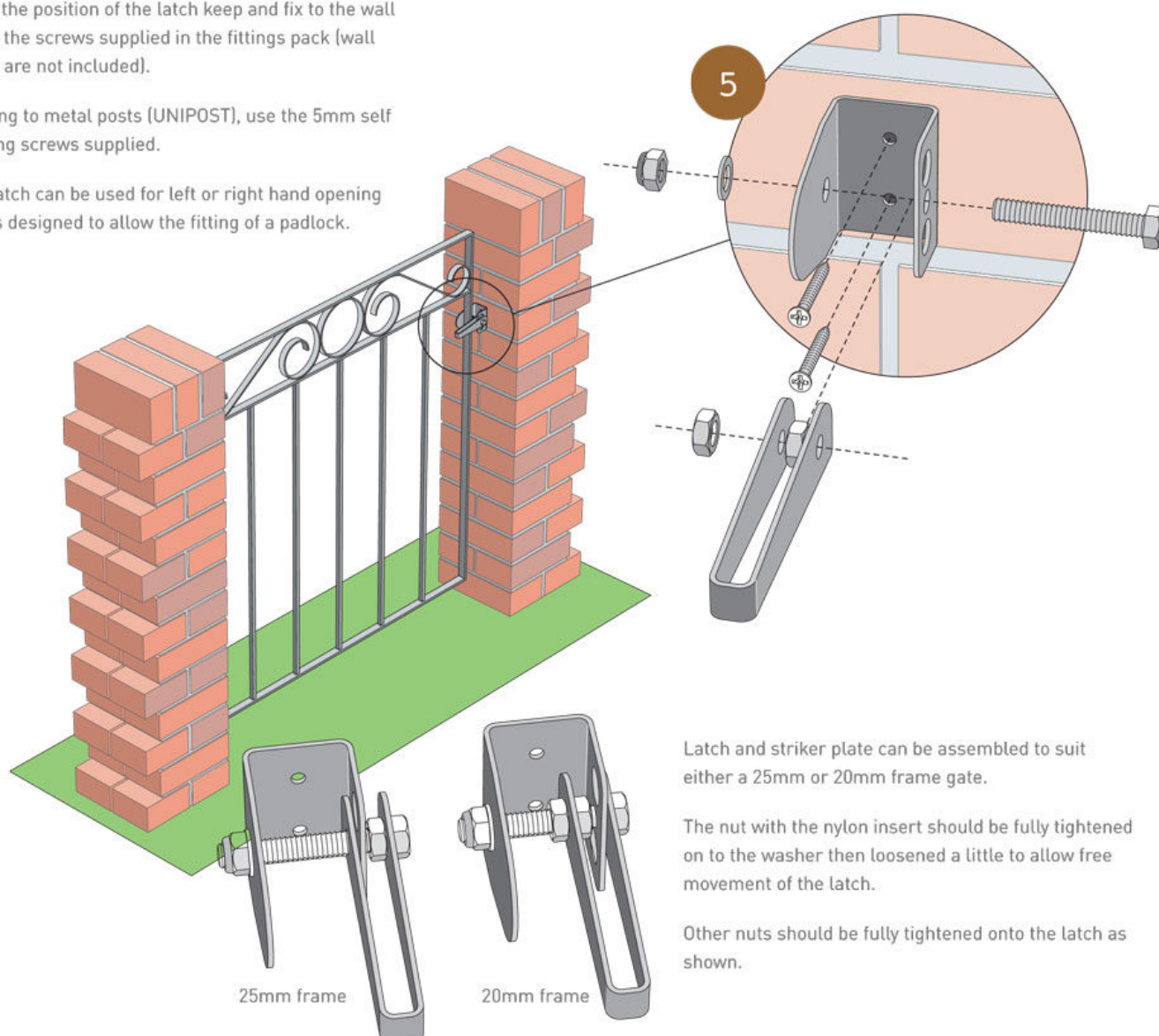


### Fitting the latch

Mark the position of the latch keep and fix to the wall using the screws supplied in the fittings pack (wall plugs are not included).

If fitting to metal posts (UNIPOST), use the 5mm self tapping screws supplied.

The latch can be used for left or right hand opening and is designed to allow the fitting of a padlock.



Latch and striker plate can be assembled to suit either a 25mm or 20mm frame gate.

The nut with the nylon insert should be fully tightened on to the washer then loosened a little to allow free movement of the latch.

Other nuts should be fully tightened onto the latch as shown.

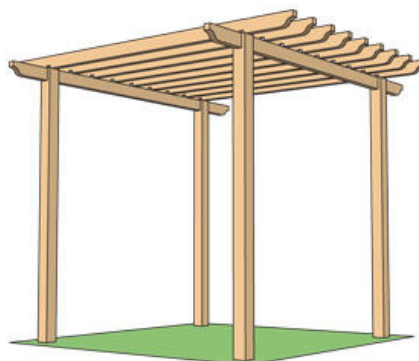




# How To Build A Pergola

Pergolas can be used in the garden to create a passageway or to frame a seating area. Grange offers a wide range of project kits as well as individual components to allow the creation of your own personal vision.

A basic pergola project is explained here, however, the basic procedures, from installing the posts to fixing the rafters, will be the same whatever design you



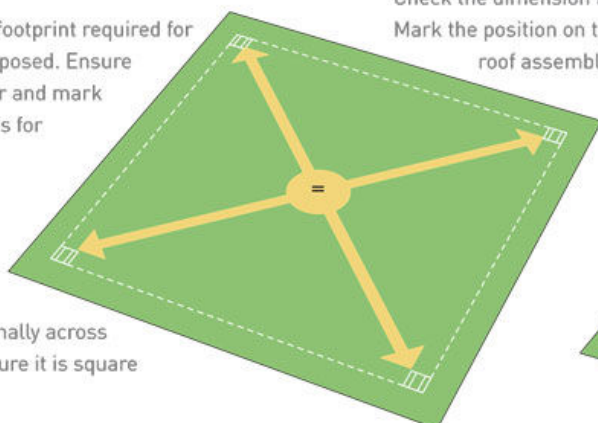
## Tools Required

- Tape measure
- Power drill
- Spirit level
- Hammer
- Sledge Hammer

## Preparation of the area

Consider the location carefully before proceeding. Where will the sun be at the time of day you use it? What access is required?

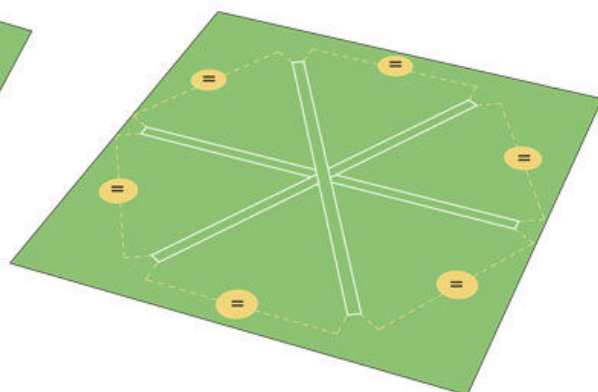
Determine the footprint required for the pergola proposed. Ensure the area is clear and mark out the positions for the posts.



Measure diagonally across the area to ensure it is square

For a domed pergola project, the best method for determining the positions of the posts is to pre-assemble the roof and use this as a template for the posts.

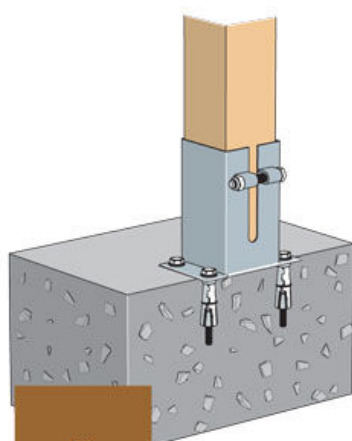
Check the dimension between the roof rafter ends and ensure that they are equal. Mark the position on the ground for each post. Remove the roof assembly and prepare the holes for the posts.



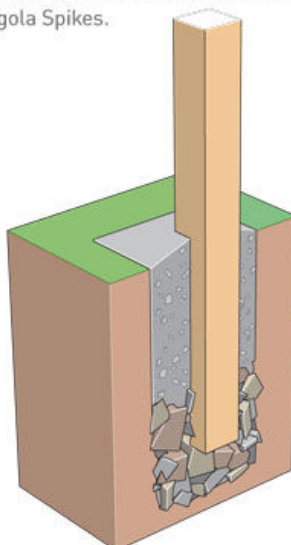
## Installing the posts

Posts are common to all pergola designs and how you install these will depend on the ground conditions.

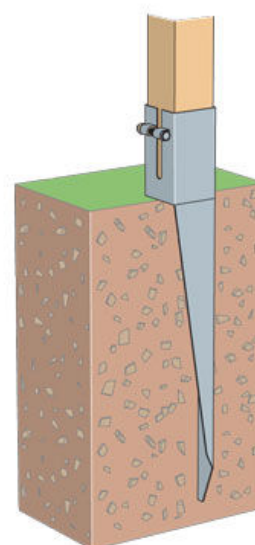
For solid ground such as a patio or a concrete hardstand area, install your posts using Metpost Pergola Bolt Downs fixed with Metpost Anchor Bolts.



For soft ground you have a choice of either installing the posts directly into the ground using MetCrete post fixing concrete (this method will require buying longer posts) or, use Metpost Pergola Spikes.



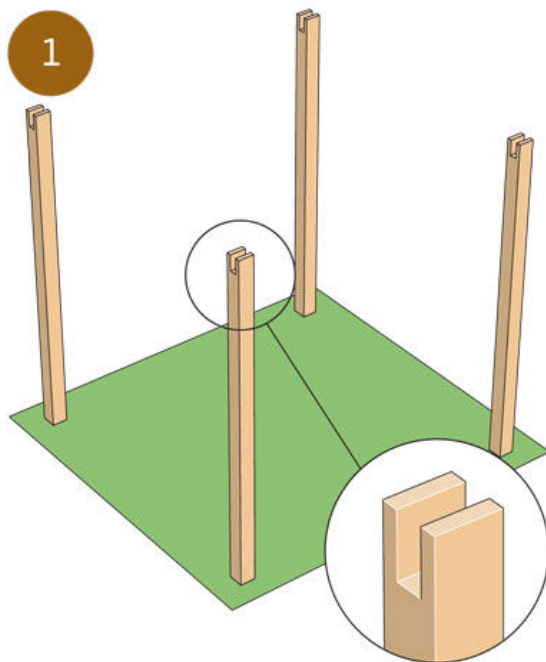
Whichever method is chosen, make regular checks with a spirit level, during the installation, to ensure that the posts remain vertical.



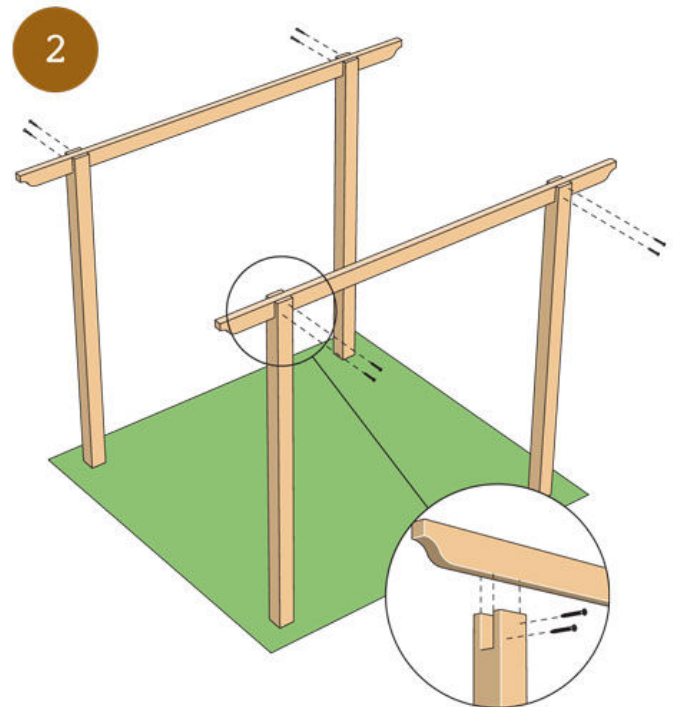
# HOW TO BUILD A PERGOLA

Site and install the posts using the chosen method of fixing. Use a spirit level during the installation to ensure that the posts are vertical.

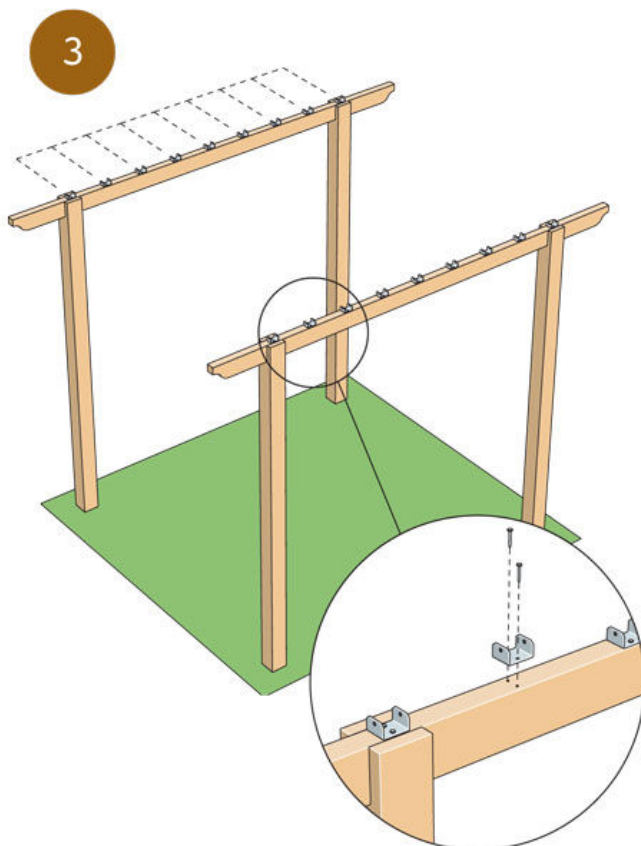
All Grange architectural posts have a cutout at the top to enable the location of Grange Rafters



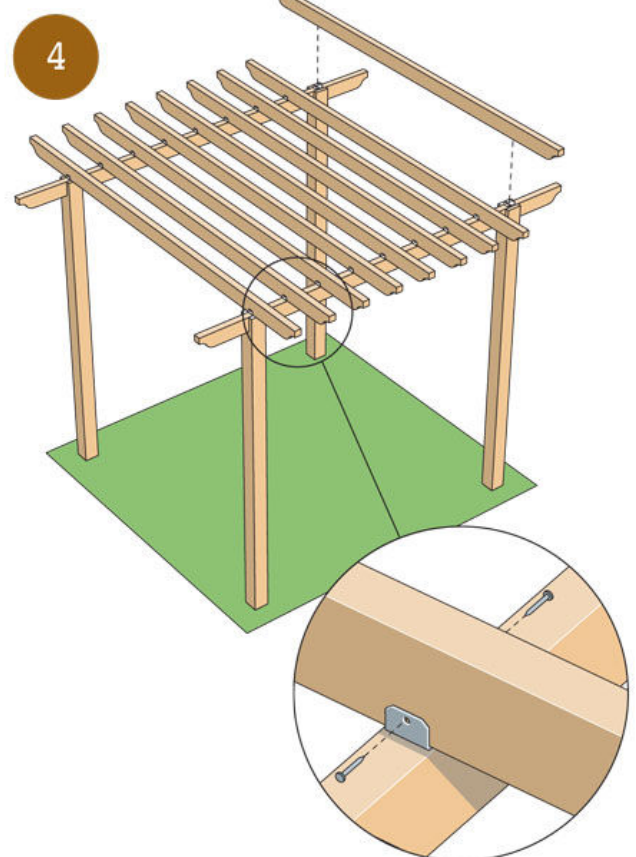
Drop the rafters into the post cutouts as shown. Ensure that they are horizontal and that there is an equal overhang at either end. Fix each rafter into place with two screws driven through the posts at either end.



Mark the centre position of the fixed rafters and fix a Metclip to each rafter. Mark the positions, equally spaced, where the remaining rafters will be situated and fix Metclips at each position.



Drop a rafter into the Metclips and adjust to ensure that the overhang at each side is the same. Fix the rafter into position using screws or galvanised nails through the pre-drilled holes in the Metclips.







# How To Install Trellis

Trellis has many uses in a garden. It can provide a framework for climbing plants, conceal unsightly areas or act as a division between garden areas. It may also be used to add height to an existing fence – either as a decorative feature or to provide more privacy.

## Tools Required Materials Required

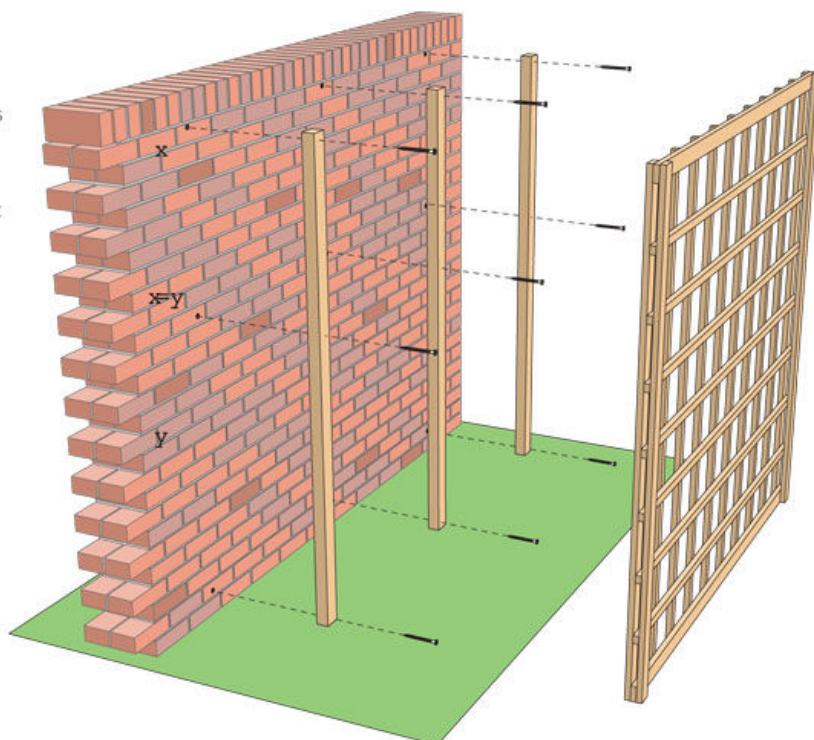
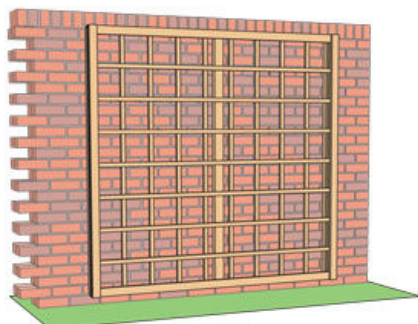
- Tape measure
- Spirit level
- Power drill and masonry bit
- Hammer

- Trellis
- Grange 50 x 50mm timber posts are ideal for use as battens
- Exterior Screws
- Galvanised Nails

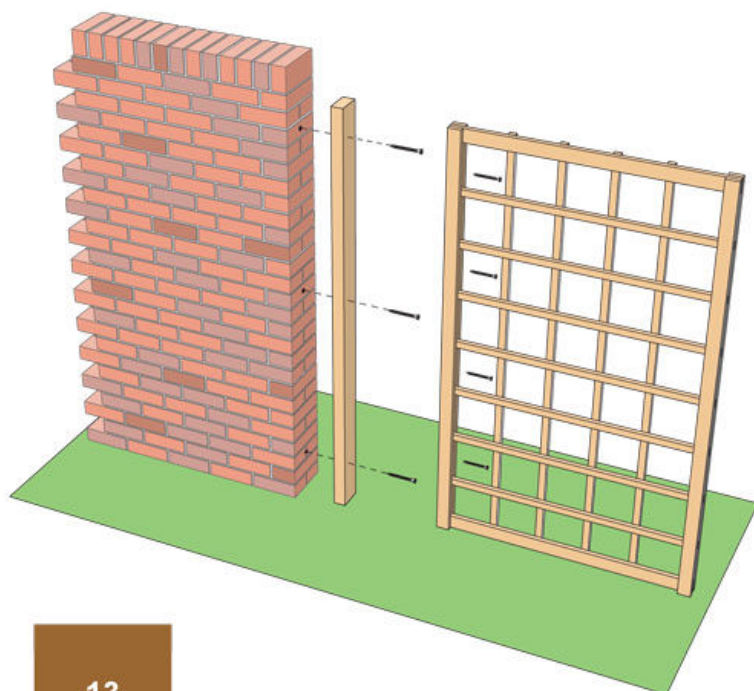
## Fixing trellis to a wall

Wall mounted trellis requires a space between it and the wall to allow plants to grow behind it. The trellis should be mounted on wooden battens to provide this space. The battens should be mounted on the wall vertically so that they do not restrict plant growth. Determine the number of battens required – space at approximately 600mm apart.

Offer the trellis up to the wall in the desired position and mark where it will be. Fix the battens to the wall using screws and wall plugs. Fix the trellis to the battens using galvanised nails.

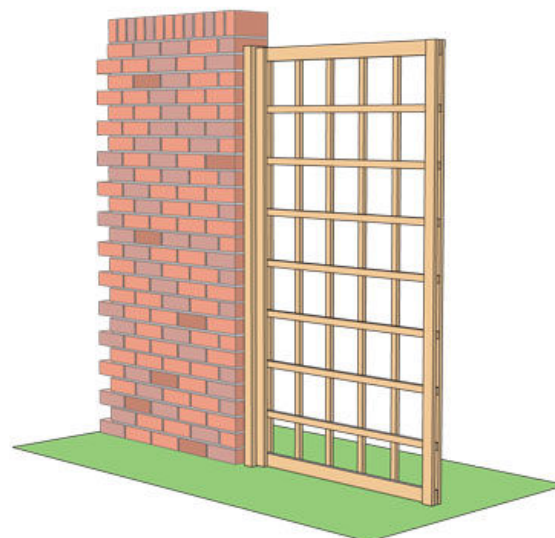


## Fixing trellis out from a wall



Fix a vertical batten to the wall using screws and wall plugs, the batten should be the same length as the trellis.

Fix the trellis to the batten using screws at equally spaced intervals of approximately 300mm.



## HOW TO INSTALL TRELLIS



1. When fixing trellis to a wall use battens to create a gap allowing plants to grow.

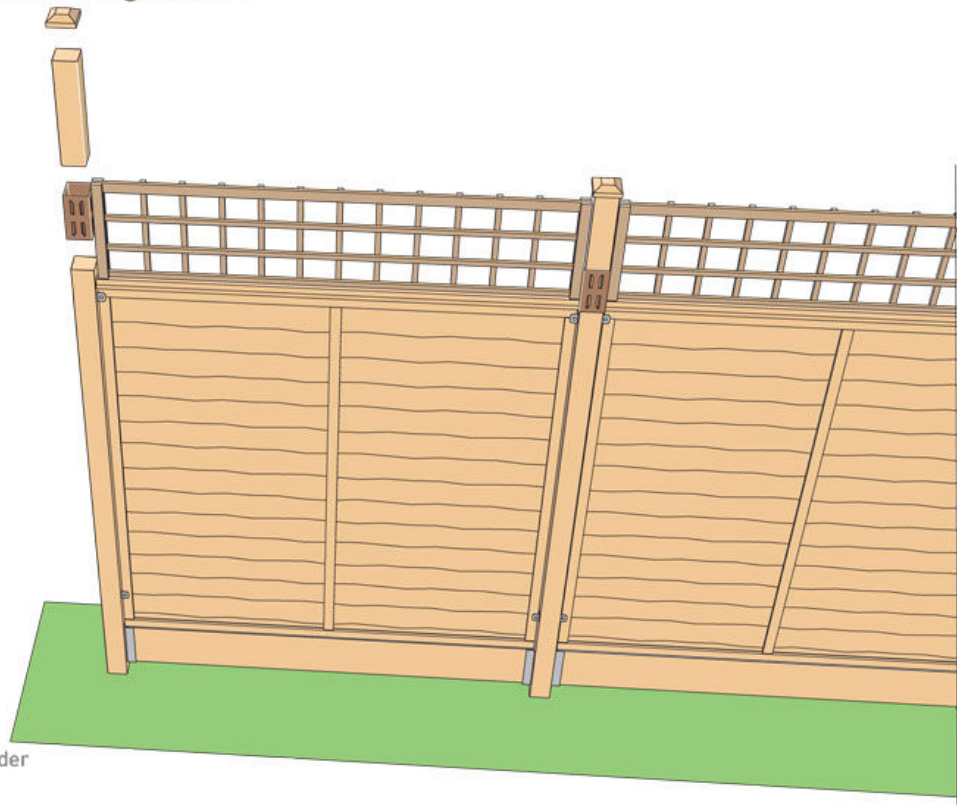
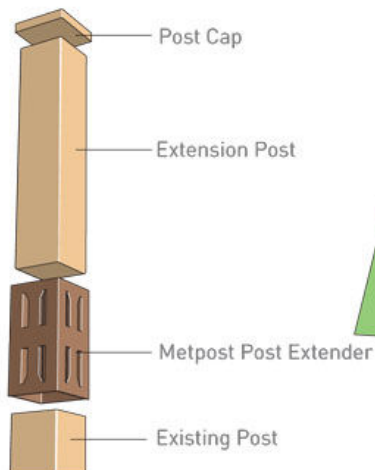
2. When fixing trellis to a house wall ensure battens are fixed above the damp proof course.

3. The appearance of any post is enhanced by the addition of a Grange Post Cap.

### Fixing trellis to an existing fence

It will be necessary to extend the existing posts to add the trellis. Use Metpost Post Extenders and a piece of extra post to gain the required height.

Fix the trellis to the extended post with Metpost Metclips or screws. Use a Grange Post Cap to the top of the post to add a decorative finish and protect the top of the post.

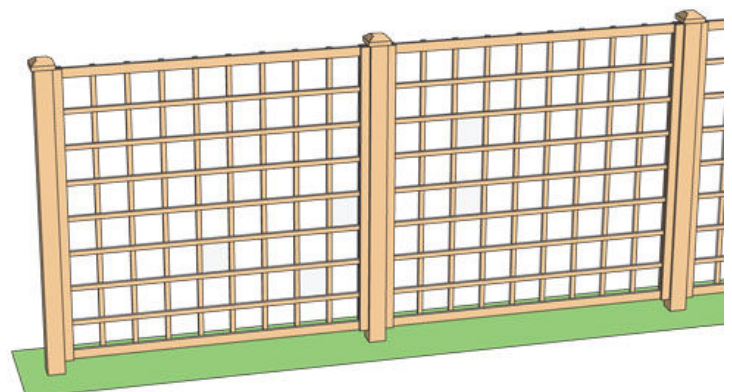
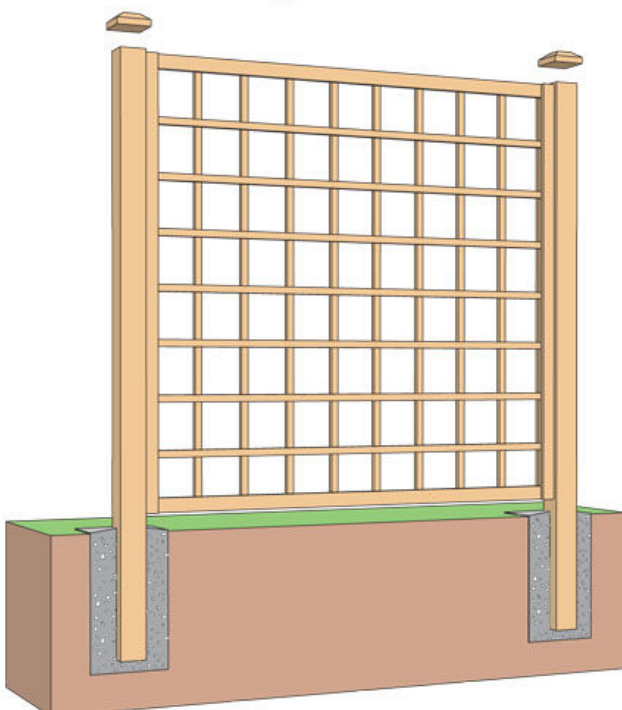


### Freestanding Trellis

To use trellis as a free standing feature or decorative fence it will be necessary to support it using posts fixed into the ground.

A minimum post size of 50mm x 50mm will be required.

Fix the posts using MetCrete Post Fix Concrete or Metpost post supports.







# How To Build Arbours And Arches

The addition of an arbour or an arch will greatly enhance the appearance of any garden and Grange offers a wide range of both to suit all your requirements. All are flat-packed for ease of transport.

These pages feature simple step-by-step instructions for the construction of an arbour or arch (an arbour can be thought of as an arch with a seat and back panel added).



Arch

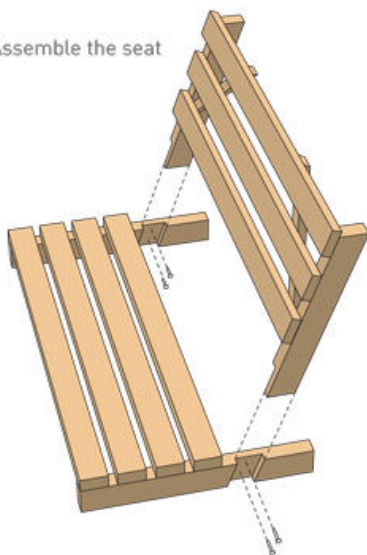


Arbour

## Building an arbour or arch

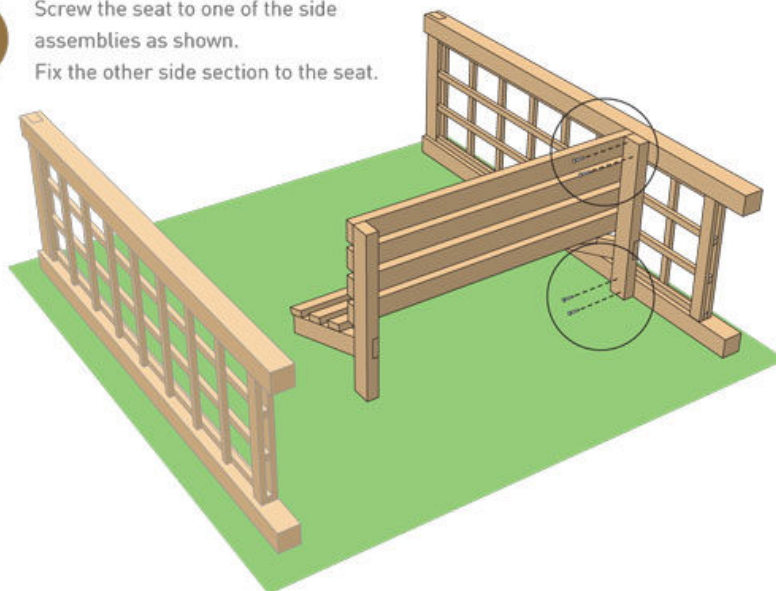
1

Assemble the seat



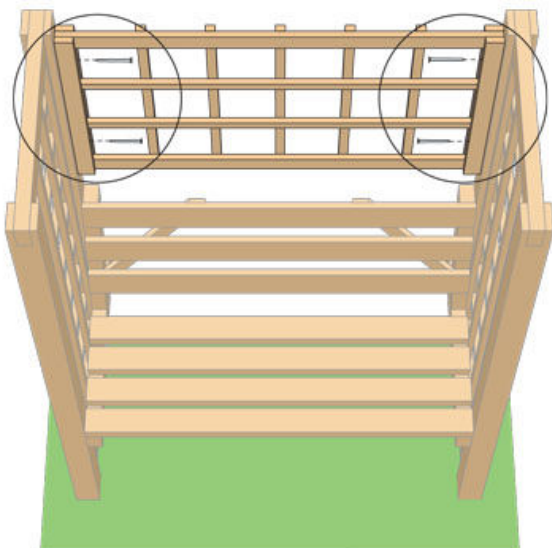
2

Screw the seat to one of the side assemblies as shown.  
Fix the other side section to the seat.



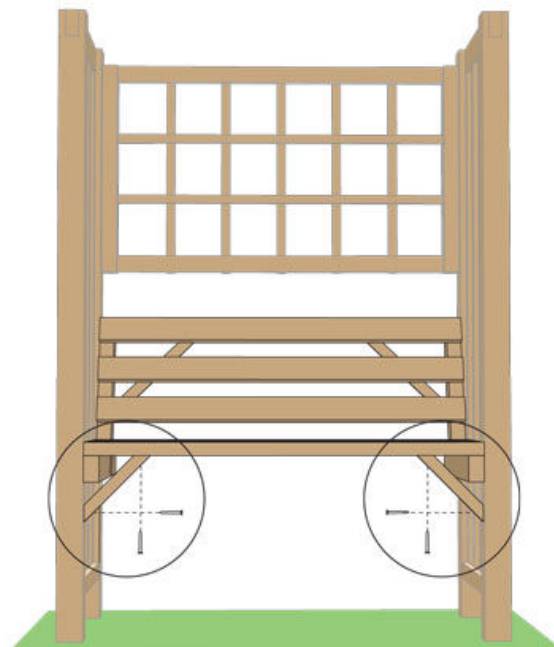
3

Once both sides are fixed stand the assembly upright and fix the back trellis panel.



4

Ensure the seat is square with the side sections and fix braces.



# HOW TO BUILD ARBOURS AND ARCHES

## Before you start

- Before you start, check all component parts against the parts list.
- Have someone available to help you - two people are recommended for the assembly.
- Ensure you have a clean flat area of adequate size for the assembly.
- Make sure you have the right tools for the job.

Assembly time is approximately one hour for the construction of an arbour and half an hour for an arch (excluding hole preparation time)

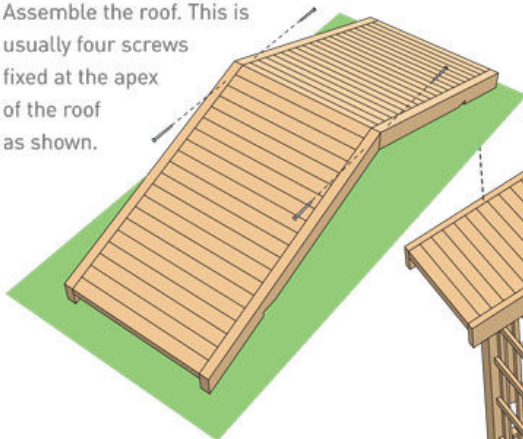


### Tools Required

- Tape measure
- Power drill
- 2.5mm drill bit
- No.2 Pozidriv drill bit
- Spirit level
- Hammer

5

Assemble the roof. This is usually four screws fixed at the apex of the roof as shown.



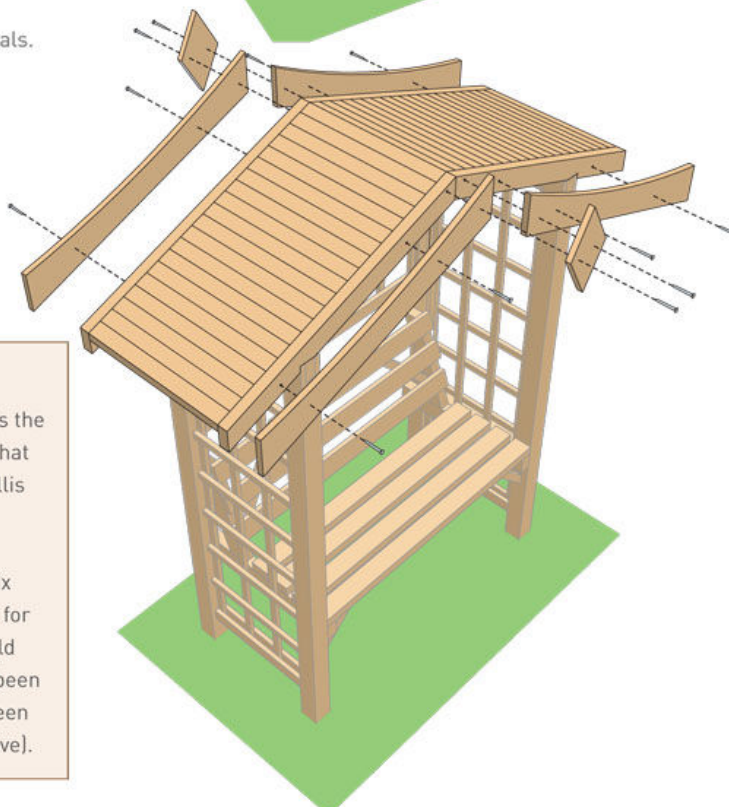
6

Fit the assembled roof as shown, using four screws driven into the top of the side section posts.



7

Fix the fascias and finials.



### Arches

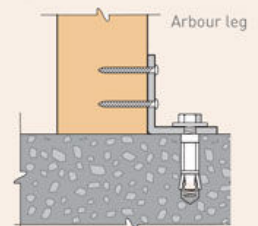
The procedure for an arch is the same as an arbour except that there is no seat or back trellis panel to fit.

Struts may be supplied to fix between the roof and posts for added stability. These should be fitted once the roof has been fixed to the posts (i.e. between steps 6 and 7 as shown above).

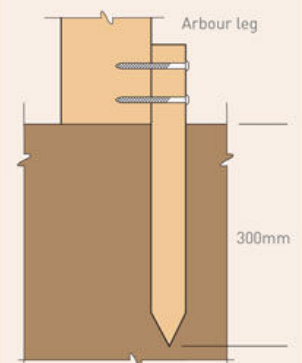
### Fixing to the ground

Arbours can be free-standing or fixed to the ground in the following ways:

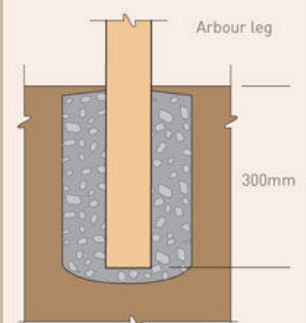
For hard surfaces such as concrete use four metal right angle brackets (one for each post), fixed to the ground using anchor bolts.



For a soft surface, timber stakes should be driven into the ground and the legs of the arbour fixed to them.



Arches have longer legs and should be embedded into soft ground. Fix the legs in place using a post-fix product such as **MetCrete**.



For a solid surface the Arch legs may need to be cut to give a suitable height. To provide stability use metal angle brackets as above or attach the arch to another stable structure such as a fence post or pair of planters.