

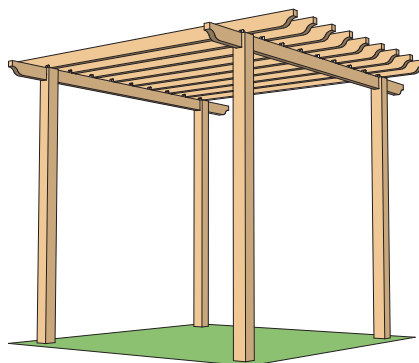


## How to build a Pergola

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 choose.



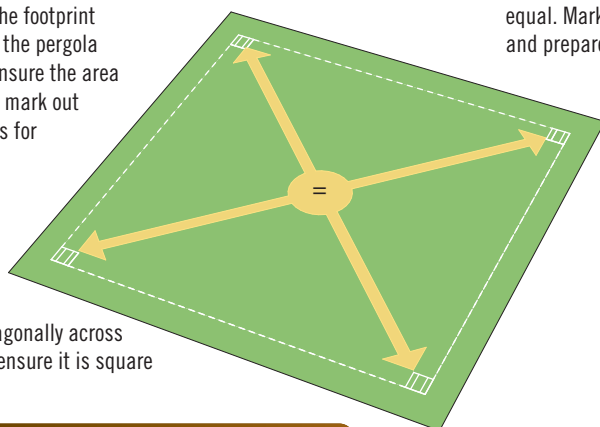
### Tools required:

- 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?

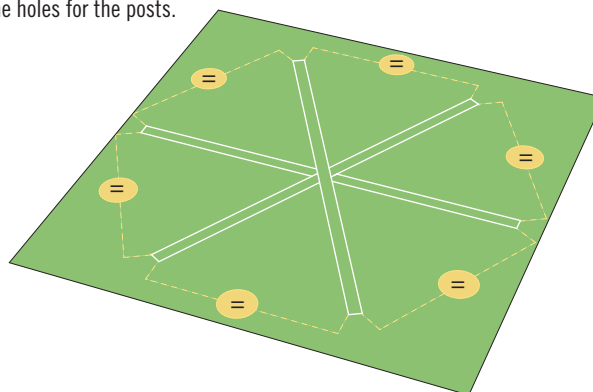
Determine the footprint required for the pergola proposed. Ensure the area is clear and mark out the positions for the posts.



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.

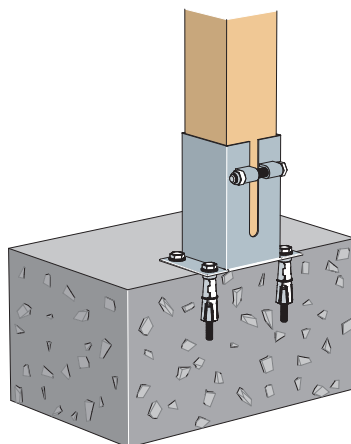
Check the dimension between the roof rafter ends and ensure that they are equal. Mark the position on the ground for each post. Remove the roof assembly and prepare the holes for the posts.



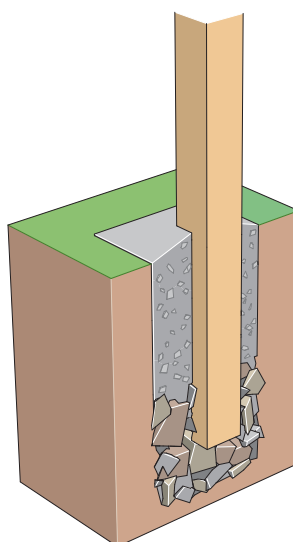
### INSTALLING THE POSTS

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

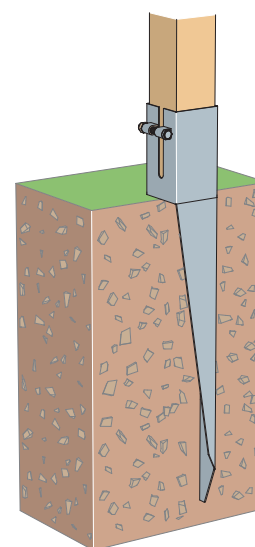
For solid ground such as a patio or a concrete hardstand area, install your posts using Metpost Pergola Bolt Downs fixed with Metpost Anchor Bolts.



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.



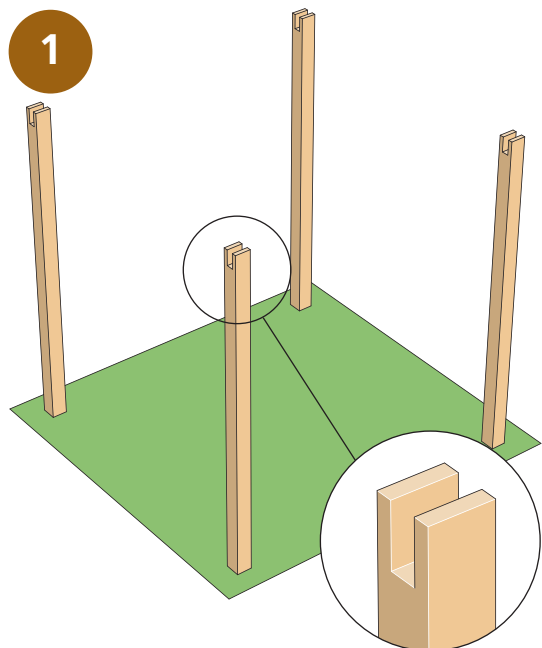
Whichever method is chosen, make regular checks with a spirit level, during the installation, to ensure that the posts remain vertical.



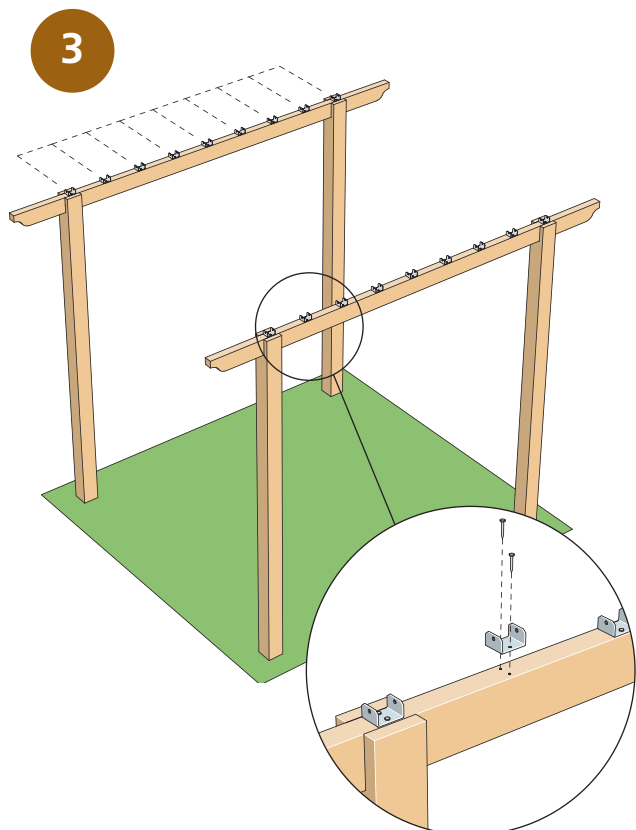
## ASSEMBLY

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.

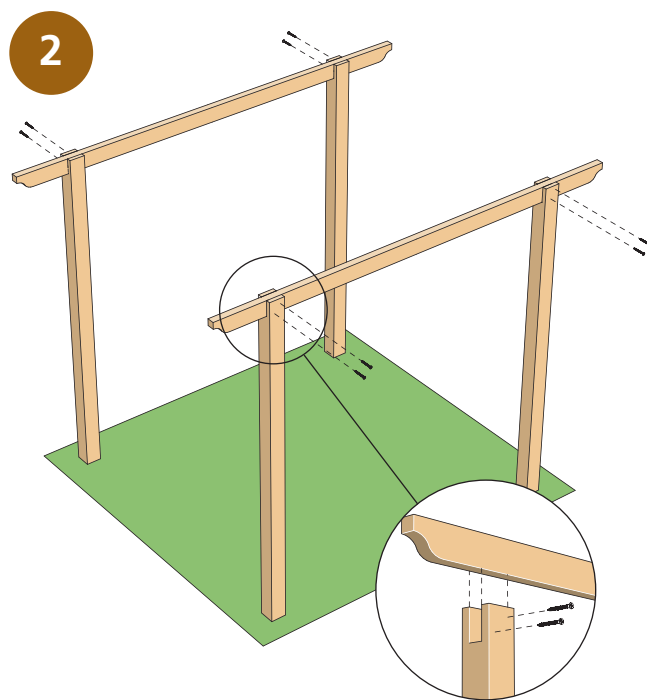
All Grange architectural posts have a cutout at the top to enable the location of Grange Rafters



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 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.



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.

