

Pergola Installation Instructions

Thank you for choosing Jacksons Fencing. Our high-quality fencing products will last for years and give you trouble-free service if you follow the installation instructions below, which are offered as a general guide.

Notes:

- 1) Please familiarise yourself with this guide before commencing assembly and check your delivery against the list below to ensure you have all the correct components and fixings to complete your project.
- 2) All sizes quoted are nominal. Please check any site-specific critical measurements prior to assembly.
These instructions aim to achieve a clearance under the side rails of around 2035mm. The clearance under the braces will be around 1700mm. Please allow for height of these braces when choosing any infill panels such as Premier Trellis. If Diamond Trellis panels are used, these can substitute the inline braces due to their inbuilt bracing, and can therefore be full height.
- 3) If the Pergola is to be stained, we recommended that this should be carried out prior to assembly.
- 4) Jacksons Pergolas are made of timber, a natural material that will have features such as variation in grain texture and colour, knots etc. It is recommended that each piece is examined prior to assembly to determine its location on completion. For example, you may wish to put cross members or posts with the most pleasing face at the front of the Pergola.
- 5) To avoid splitting the timber during nailing, it is recommended that the piece of timber being fixed (i.e. the first piece of timber that the nail passes through) is pre-drilled. The drill bit should not, however, penetrate into the second piece of timber by more than 5mm.
- 6) Similarly, when fixing is carried out using screws, it will be necessary to drill pilot holes.
- 7) Choose a reasonably level area to site your Pergola.
- 8) If there are components missing, please call 01233 750 393 and speak with a sales advisor. Please ensure that you have both your Order Confirmation and Delivery Note to hand.
- 9) The list of components below can be applied to Single Pergola (One Bay), Single Pergola (Two Bay), Double Pergola (One Bay) and Double Pergola (Two Bay).
- 10) Each additional bay will include the same components as a one bay Single or Double Pergola less one (Single Pergola) or two (Double Pergola) upright posts and less one cross member and less two corner braces (Double Pergola only) as applicable.

Item	Description	Single Pergola (one bay)	Single Pergola (two bay)	Double Pergola (one bay)	Double Pergola (two bay)
H	Posts	2 No. 91 x 91 x 2700mm	3 No.	4 No.	6 No.
	Double ended side rails	2 No. 95 x 35 x 2420mm		4 No.	
	Single ended side rails	N/A	4 No. 95 x 35 x 2174mm		8 No.
	(Intermediate side rails, for 3 or more bays)	(2 No. per extra bay 95 x 35 x 1925mm 2700mm)		(4 No. per extra bay)	
A	Single pergola cross members	4 No. 570 x 95 x 35mm	7 No.	N/A	N/A

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Tools Required:

Safety:

Please ensure that your work area is clear and tidy, and that components and tools are close to hand. When using hand and power tools please ensure that you follow the manufacturer's safety instructions including the use of safety glasses and gloves.

When using ladders or lifting heavy objects please observe correct procedures. Only lift objects that are well within your capability. Avoid overhead lines.

Consider whether underground services (electricity cables, gas pipes, water, etc) exist in an area to be excavated.

Use a Cable Avoidance Tool (CAT scanner) wherever possible. Watch out for signs of services (coloured gravel etc.) as excavation continues. Do not use a mechanical excavator within 500mm of detected services.

Spade/Post hole borer	3mm and 4mm wood drill bits	Spirit level
Carpenters hammer	2 No. 200mm G clamps	Gravel for base of post
Power drill	2 No. string lines	Concrete/Post concrete

Installation:

- 1) Post holes should be approximately 300mm wide and 700mm deep.
- 2) It is recommended that all posts be fixed in the ground using a dry mix of concrete to give good stability once set. However, note that the posts will inevitably shrink and swell with changes in ground and atmospheric conditions.
- 3) As the installation proceeds, it is imperative that posts are set vertical and remain in line at all times. A good spirit level must be used throughout the process to ensure that accuracy is achieved.
- 4) When following the instructions below, posts should initially only be fixed in such a way that they can be adjusted later whilst carrying out final alignment.
- 5) For installation on uneven ground, please refer to the additional notes at the end of this guide.
- 6) Please ensure that all timbers cut, notched or drilled during assembly are liberally coated with Jakcure End Grain Preservative to maintain protection. Failure to do so will invalidate your Jakcure 25 year Guarantee. Timber sections in the ground should not be cut, drilled, notched or planed after Jakcure Treatment.

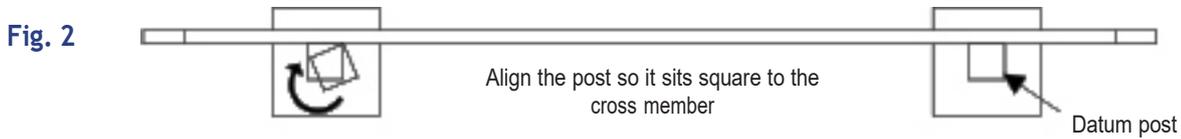
Fixing the posts:

- 1) Clear a level working area and layout markers where you intend to place your posts by using the string line (at 1925mm centres to form each bay and at the required distance to set the width between the sides for Double Pergolas). (Refer to Fig.3).
- 2) Dig the holes at the markers 300mm x 300mm and to a depth of 700mm.
- 3) The post should be located on a gravel bed approximately 100mm deep then set in concrete as shown below in Fig. 1, to provide drainage and help prevent premature rotting of the post.
- 4) For installation on level ground, draw a pencil mark around each post 600mm up from the bottom. Position the first post in one of the holes at a corner (or end for Single Pergola) and concrete into position as shown in Fig.1 so that the pencil line is at ground level, making sure to keep it absolutely vertical/plumb using a spirit level, and in line with the string line. If installing on sloping or uneven ground, you will need to adjust the post depths for the changes in levels – please refer to the last section.

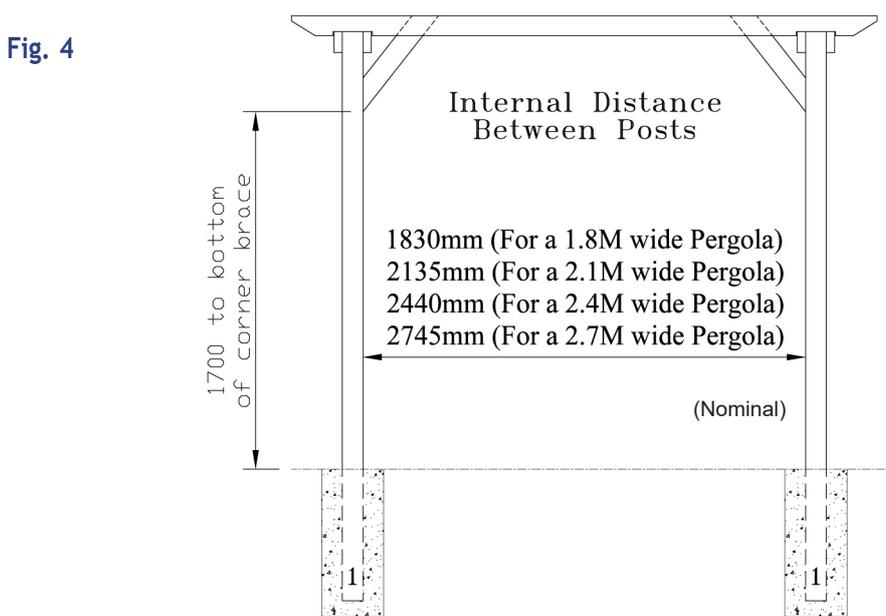
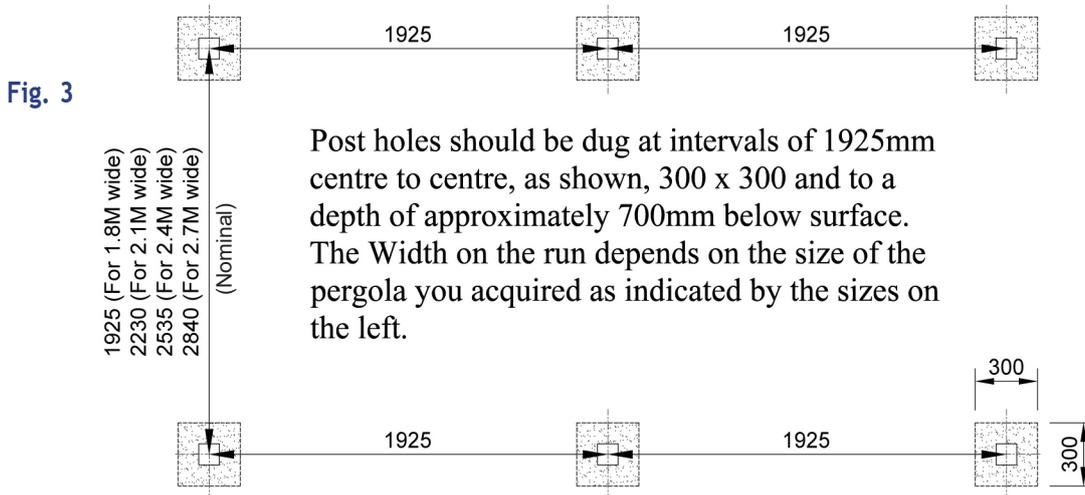
Fig. 1



- 5) Allow for the first post to fully set. This will be used as the "datum" or "reference" post to which the other posts will be set.
- 6) When the post is firmly fixed into position place the next post in its hole along the run, to which the side rails will be fixed. Position the post as before, keeping the pencil line level with the ground.
- 7) It is critical that posts should be in line, square and at the same height as the datum post. You can check the line of the two posts by clamping one of the cross-members along the face of the datum post and running it across to the next post to be set to ensure that it is correctly aligned and square as shown below in Fig.2.



- 8) Set the post into position as before keeping the pencil line level with the previous post.
- 9) Position and set the remaining posts using the techniques above and referring to Fig. 3 & Fig. 4 for extra guidance.



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Fixing the Rails, Braces & Cross-Members (Single and Double Pergolas):

NOTE:

As mentioned previously, it is best to pre-drill pilot holes so that the screws and nails will go in straighter and be less likely to split the wood. Use a 3mm drill bit for 65mm nail pilot holes and a 4mm drill bit for 75mm nail pilot holes.

- 1) With all the posts in position, fix a post top to each post, in line with the 'length' of the pergola (i.e. in line with the side rails yet to be fitted) using 2 no. 100mm nails, as shown in Fig. 5a.
- 2) Fix the intermediate side rails (if applicable) into their intended positions using 2 no. 75mm nails at each end, on both sides of the posts, as shown in Fig. 5a, so they are also flush with the top of the post tops and joined evenly at the centre on the face of the post. If your pergola only has one or two bays you will not have any intermediate side rails.

Fig. 5a

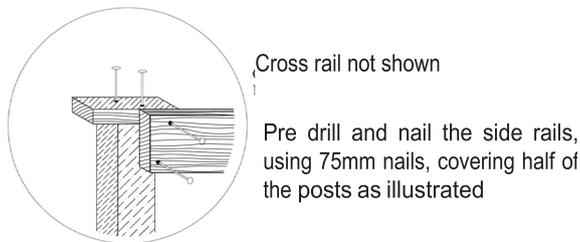
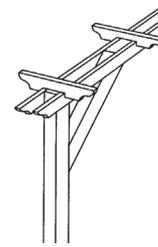


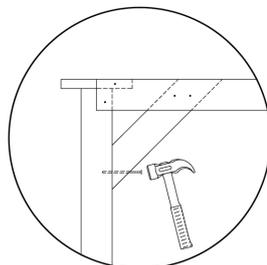
Fig. 5b



- 3) Next, fit the single ended side rails, as shown in Fig. 5b, using 2 no. 75mm nails at each end, into the post. These have a special profile on one end. If the pergola is only a single bay you will only have double ended side rails to install, similar to that shown in Fig. 5b.
- 4) With all the side rails fixed firmly into position, fix the spacer blocks between each run of the side rails half way between each post using 1 No. 75mm nail through each rail and into the spacer block.
- 5) Attach the inline braces to the posts through the angle of the brace as shown in Fig. 6 with 1 No. 100mm nail and between the rails using 2 No. 75mm nails.

Fig. 6

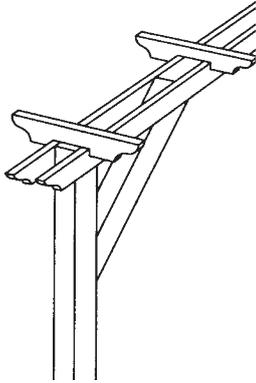
Pre drill and nail the in-line & corner braces in the three positions shown on the right



For Single Pergolas:

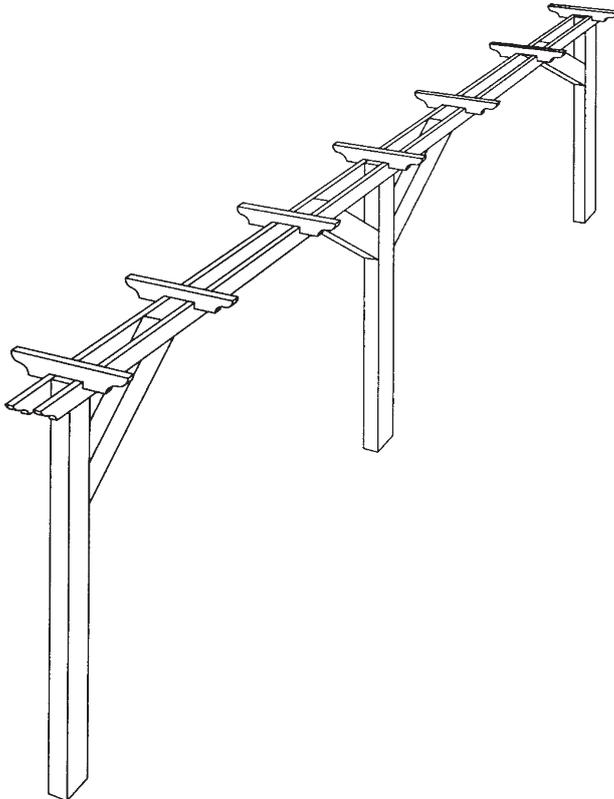
6) Place a short cross-member across the top of the two side rails and centred above the post as shown in Fig. 7.

Fig. 7



- 7) Pre-drill and fix into place using 1 No. 75mm nail each through the side the cross-member and down at an angle into the top of each side rail (so 2 nails per cross member).
- 8) Repeat the process on each vertical post so the cross-members are firmly attached to the side rails.
- 9) Finally, evenly space and fix the remaining cross-members to complete your project. (Fig. 8).

Fig. 8



Your Single Pergola is now complete. We are confident it will give you many years of pleasure and enhance your garden.

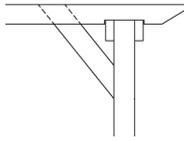
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For Double Pergolas:

- 10) With both rows of posts set in their correct positions (See Fig. 3) and all the in-line braces attached, fix the corner braces. The position of the corner braces is vital to the cross-members. Pre drill and attach the first corner brace through the angle and into the post with 1 No. 100mm nail, so the lowest point of the brace is 1700mm high from ground level as shown in Fig.4 and Fig. 9. If the ground level is uneven braces should be installed approximately 380mm from the top of the post.

Fig. 9



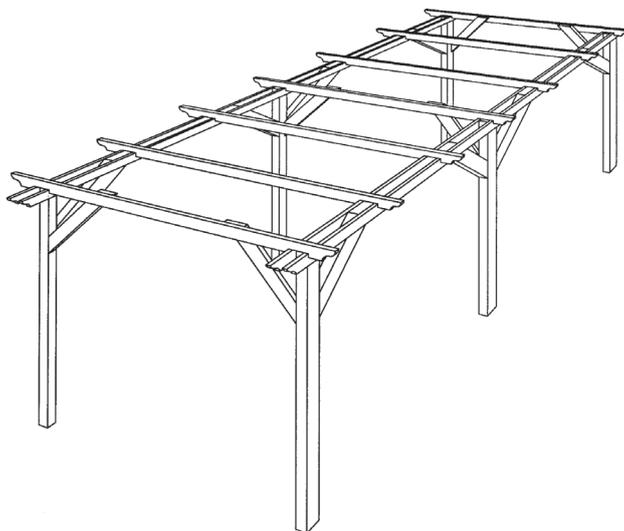
- 11) Attach another corner brace in similar fashion to the opposite post.
- 12) Place a long cross-member across the top of the two sides, above the first run of posts. Push the corner braces against the cross-member and pre-drill and fix into place on the inside face using 2 No. 75mm nails through the top of each brace (See Figure 10).

Fig. 10



- 13) Pre-drill and fix the cross-member into place using 1 No. 75mm nail through the side the cross-member and down at an angle into the top of each side rail (in total 4 nails per cross member).
- 14) Repeat the process on each vertical post so the cross-members are firmly attached to the side rails and corner braces.
- 15) Finally, evenly space and fix the remaining cross-members to complete your project. (Fig. 11).

Fig. 11



Your Double Pergola System is now complete. We are confident it will give you many years of pleasure and enhance your garden.

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Additional considerations for installations on uneven ground

Working on Uneven Ground Levels

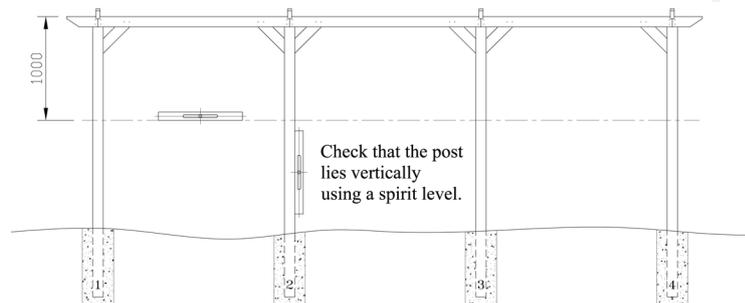
When working on uneven ground, placing posts in holes of similar depths means that the top of the posts will not be in line with each other. This causes more difficulties when attaching the Side Rails and Cross Members

It is imperative to get the top of the posts aligned with each other and in the correct vertical position. This can be accomplished by following the instructions closely and frequently using a spirit level to check the positioning during setting.

Aligning the Posts

After setting your first post, mark the set post and the remaining posts with a pencil line 1.0m down from the top of each post.

When positioning the next post in the run, attach a string line so that it runs taut and horizontally along the pencil line of each post. Use a Spirit level, holding it on the string line, and position the post so that the string line lies horizontally.



Safety Notes:

Biocidal Products Regulation (EU528/2012):

Jakcure® treated articles incorporate biocidal products to protect against wood destroying organisms.

Active ingredients include: Copper(II)Carbonate / Copper(II)Hydroxide / Propiconazole / Tebuconazole

Wear gloves when handling freshly treated wood. Avoid breathing dust when cutting. Dispose of off-cuts responsibly – do not burn.

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