



Large Wooden 4m x 2m Koi Pond Assembly Instructions

www.thegtcompany.co.uk

Information

A basic video is available on our website <u>www.gardenparadise.net</u>. The video shows a project, from start to finish, of one of our other ponds and is an informative guide of the basics, such as building the walls and hanging the liner, which compliments this book. For detailed instructions please primarily use this book. You are advised to watch the entire video and read the complete book before starting your project.

In the event of any problems please contact your dealer immediately. Warranty claims may be affected if there is a delay in reporting a problem or if these instructions have not been followed.

Tools required are listed on page 2

Recommendations For Storage After Delivery

- Do not store the timber in direct sunlight or under a dark cover as this may cause distortion which will make installation extremely difficult.
- Assemble the structure as soon as possible after receipt.
- Assemble the structure in one go, preferably in the morning while temperatures are cool.
- If a timber product must be stored, then use a cool well-ventilated place, sheltered from the rain and sun.
- Components that are damaged, cracked or distorted due to incorrect storage and/or handling will not be covered by the warranty.
- Please ensure the liner is stored in a warm environment before installation.

In the pre-assembly period wood is sensitive to variations in temperature and humidity. It is therefore necessary that you take precautions immediately after delivery.

Wood is a living material and once cut, the appearance of cracks, slight movements or changes in colour are normal and the planks (except in extreme circumstances) do not need replacing. The planks will have been recently treated and may be delivered still moist.

In the case of rapid temperature change these planks can dry very quickly and lose one or two millimetres of height. This might give the impression that the planks are lifting while they are actually shrinking. Whilst in cooler wet conditions the wood may expand back to its original size. This is completely normal.

Please note: some of the images in this installation manual may be from another product and are being used for illustration purposes only.

Introduction

Congratulations on your new purchase! We hope it provides you with many years of happiness in the garden.

This product has been treated with ACQ, which is child friendly and warrantied against rot and insect attack (10 year warranty on 44mm wood and 5 year warranty on 27mm wood).

Please remember timber is a natural product and can be prone to expanding, shrinking and natural defects. Please see page 4 for more information.

After receiving your timber product we advise that you unpack and assemble it at the earliest opportunity.

Wood is a living material and once cut the appearance of cracks, slight movements or changes in colour are normal and the planks (except in extreme circumstances) do not need replacing. The planks will have been recently treated and may be delivered to you still moist. In the event of a rapid change in temperature these planks can dry very quickly and lose 1mm or 2mm of height. This might give the impression that they are lifting up however they are actually shrinking.

This product is heavy and some components may require two persons to lift.

At every point of manufacturing this product, care has been taken to provide quality and satisfaction to our customers. If any part of this kit is missing or damaged you must contact us before proceeding with assembly of this product.

Tools Required

- Cordless screwdriver with a No.2 Pozidrive bit and 8mm Hex bit
- 3mm drill bit to suit wood/plastic
- Saw to cut plastic liner-lock
- Knocking block (supplied if more than standard height)
- Tape measure
- Sharp scissors
- Hammer/preferably large soft mallet
- Pencil
- Square
- Safety goggles



Natural Timber Characteristics

Whilst we try and ensure that our timber products reach you in perfect condition, we are dealing with a natural material and there are many characteristics which may arise.

These are completely normal and have no detrimental effect on the product. We also manufacture our products so that most characteristics are on the inside of the pond where you would not see them. Or the plank may be reversible, so that it can be used either way around.



Shake appears like a series of splits. With timber of this size you will always encounter some degree of this (usually on one side). This does not affect the strength of the product and you will find the shake opens in continued warm weather and then closes when the weather is wet and cooler or there is a lot of moisture in the air. We do manufacture our products so that most natural characteristics are on the inside of a product where it will not be seen.



Pith or core is the centre of the tree, this is similar to the above and quite often found alongside each other. Most of this is typically machined to be on the inside of the product.



Knots and Sap are typically found in timber as shown. These are generally not an issue and can be beneficial relieving stress points in timber. In many people's opinion, this adds character to the products. Sap can also be present and can be carefully scraped off with an appropriate tool.



Cupping is mainly caused by the treatment of the timber. Where the timber has been kiln dried and then pressure treated it can cause cupping. Although we do limit this, the best way to counteract it is to have one plank with the growth rings facing one way and the next with the rings facing in the opposite direction as you build the wall of your product (counter cupping).



Counter cupping is only possible on square or rectangular products as the planks are reversible. On octagonal products if you have a problematic plank try it in another wall position to see where it will fit best.

Please note: we cannot accept returns for natural characteristic complaints (except in extreme circumstances, at our discretion). This includes planks which may arrive damp or containing mould residue (this is not a lasting or detrimental factor). Any damage caused by poor handling or failure to follow instructions is also not covered by our returns or warranty procedures.

SAFETY NOTICE

It is important to ensure the electricity supply for a filter pump or any other electrical equipment has RCD protection circuit and conforms to current electrical regulations. Please consult a `ualified electrician for any electrical supply you intend to install for your pond.

NEVER LEAVE CHILDREN UNATTENDED AROUND THE POND WHEN COMPLETED OR AT ANY STAGE OF THE CONSTRUCTION.

This pond is not intended to be used as a swimming pool.

Preparing The Base

You will need either a flat and level pre-existing hard standing, or to create a solid base for your pond to stand on. Our recommendation would be a 150mm thick concrete base with reinforcing mesh. However, if you are confident that the area where the hard standing for the pond is strong enough you can start building the structure. If you are unsure, consult a ground engineer as you may need to modify an existing base. It is very important that the result on the concrete is smooth and level as water will always find a level and show, if the pond structure is not level you will see any poor levels when you view the water level. Our minimum requirement would be to build a 600mm wide trench for the metal brace locations as per the image shown for base preparation.



Recommended concrete base size to suit 4m x 2m rectangular pond







Our wooden ponds can be installed above ground, partially in or fully in ground. However, if you have your pond fully or partially in ground you will need to ensure there is adequate drainage so that the timbers of your pond will not to be permanently submersed in water. Use an adequate amount of pea beach around the structure with a run off to a soak-away or similar, so that water cannot build up around the structure and rot the timbers. If an adequate amount of drainage in the form of pea shingle or similar has not been used, this may affect the warranty.

This product has been treated with ACQ which is child play friendly and warrantied against rot and insect attack (10 years on 44mm wood and 5 years on 27mm wood).

However, if this product is being installed completely or partially below ground level, you will need to install adequate drainage around the pond. We recommend 300 - 450mm width of pea shingle, all the way around the product. Never use a plastic membrane around the outside of the product as this will accelerate any deterioration of a timber product.

The timbers are treated for ground contact only and are not to be submersed permanently in water. Please also note that any modification to a wooden structure including drilling or cutting a wall plank will void the warranty on any plank which has been altered. As a precaution if you do require to modify a plank, we suggest that you treat the cut area with a good quality timber preservative if below ground level. Ensure any treatment does not come into contact with the liner.

Building The Timber Structure

Please check the Contents List and drawing to establish that all parts are present on delivery, you must report any damaged or missing items as soon as possible.

Top Tip: Lay out the wooden wall planks in an orderly fashion in the centre of the pond to be built. This will save you having to climb in and out of the pond and could save you time and money.



Understand The Wooden Pond Wall Profiles

Note: The four different types of profile used for building the structure walls

Building The Wall Structure



Once you are satisfied with the base for your wooden pond, locate the long bottom half planks. Place a long half plank centrally against the metal braces. One on each side, mark the centre of the bottom half planks so you can precisely position them.



The next step is to lay two standard planks over the bottom half planks. This will form the first layers/outline of your pond. Interlock the notches on the planks.



Pond outline laid out between two metal braces.



From this point onwards, it is essential that you use the knocking blocks provided, *(see picture below)* and do not use a mallet directly on the pond wall timbers as you will flatten the tongues, may damage the timbers and make it extremely difficult to install the pond walls. When fitting the wall planks, make sure you place the plank down evenly over both notches and locate the tongue and groove between each plank before you use the mallet to close the tongue and groove tightly together.



The plank should go downward with the plank remaining horizontal. When installing longer planks get somebody to help you to do this. The best way to install longer planks is two people tapping the plank downward at each end and locating the plank properly before hitting it tightly together.



Knocking Block

Top Tip: Locate the tongue and groove first before hitting it down firmly with a heavy mallet and knocking block as shown.

Once you have two full planks on the ends of the pond, you may want to think about the position of any filtration planks/filter plank packs you may have purchased.

(More detail on these is in the back of this booklet).

You can install these at the same end of the pond however it may increase water flow if you do this at opposite ends of the pond.





Continue to lay down the planks until you reach the 7th plank from the ground on the short wall. This will be the last standard plank on these walls before you install top full planks.



To finish building the wall sections fit the top half planks.



Once the wall sections are built, the next stage is to fix the ring-beams supports in place



Installing Wooden Top Ring-Beam, Support Blocks





Examine the laminated drawing provided carefully. You will note there is a large timber ring-beam, which runs around the perimeter of the pool at the top of the structure walls. This gives strength and support to the top of the pond, whilst also providing a fixing point for the top shelving.

Take note on the provided A3 laminated drawing of the positions of the ring-beam, ring-beam blocks and vertical supports, carefully mark out locations.

At every cross section in the main timber walls the 50mm x 6mm hex screws must be used to fix the main ring-beam in place. Use a small section of the end cap channel, place it on the end of the wall. This will help gauge the location of the ring-beam. It may be necessary to trim the ring beam to fit.

Fix the ring-beam blocks to the outside of the wall on your marked positions from the inside of the pond, using the 5mm x 100mm screws. When installing ring-beam and the ring-beam blocks pay particular attention to the locations marked on the laminate drawing.



It may also be necessary to trim either ringbeam or ring-beam block if it is too tight. On the outside of the pool, when fixing the ringbeam to the ring-beam blocks, the majority of fixings are the 5mm x 70mm stainless countersunk screws as pictured left. Use the screw digger supplied in the fixing kit to countersink the screw hole slightly, this makes it a much neater fixing.

Ring-beam installed in this image.



Installing The Vertical Supports And Metal Brace Covers



You will need to mark and cut the vertical supports and metal brace covers.

Firstly, mark the full height of the vertical supports and cut to length based on the wall and ring-beam height.



Next, individually mark each vertical support at the bottom of the ring-beam timber. Measure the distance from the outer wall to the inside of the ring-beam it measures approximately 123mm.



Cut out the required amount so when the vertical support is snugly in place it is no higher than the pool wall and sits nicely under the ring-beam.



Vertical supports should look as they do in this photograph when placed in position. There are two 44mm thick vertical supports and a brace cover timber which hide the metal braces.



Measure and cut each metal brace cover to suit each set of vertical supports. Use the metal brace cover to gain the correct spacing between the vertical supports, by using the width of the board as a guide.



On the inside of the pool using 100mm screws, provided in the fixing kit, fix a screw into the vertical supports through each wall plank as shown. Use a spirit level and fix a screw at the top and bottom of the wall first, then fix a screw through each individual plank. It is handy to have another person on the outside to hold the vertical supports while you do this.



On the outside of the pond fit four 5mm x 70mm stainless steel screws, supplied in the fixing kit, through the ring-beam into the vertical support.



Finally, fit the metal brace covers using ten 4.5mm x 65mm coated screws per brace cover, evenly spaced out.

70mm Vertical Supports



Vertical supports were used to cover the metal brace supports, repeat this for the 70mm vertical supports. These should be marked out the same way.

You will need to mark and cut the vertical supports and metal brace covers. Firstly, mark the full height of the vertical supports and cut to length based on the wall and ring-beam height.

Next, individually mark each vertical support at the bottom of the ring-beam timber. Measure the distance from the outer wall to the inside of the ring-beam (it measures approximately 123mm).

Cut out the required amount so when the vertical support is snugly in place it is no higher than the pool wall and sits nicely under the ring-beam.







On the inside of the pool using the 100mm screws, provided in the fixing kit, fix a screw into the vertical supports through each wall plank as shown. Use a spirit level and fix a screw at the top and bottom of the wall first, then fix a screw through each individual plank. It is handy to have another person on the outside to hold the vertical supports while you do this.

Installing The End Capping Channel



Fit an end capping to each end section of wall, you may need to gently tap it in place with a rubber mallet. Then mark it with a pencil and cut to length.



Work your way around the pool trimming each end capping to length.



Fix each end capping in place using the 4mm x 65mm coated screws provided in the fixing kit.

Fix one into the top plank and bottom plank of each wall section, then two more spaced out evenly between the top and bottom screws. In total there should be four screws per end cap channel.

Fixing The Top Shelving





Take your time to evenly space out the top shelving and manoeuvre it into the correct position. This is usually one of the trickiest parts of the build, so it is worthwhile taking your time and double checking everything before you start fixing it down.

It is best to start with the outer shelving. For example, measure the back edge of the shelving to the end cap channel so you can ensure you have an even overhang all the way around the pool.





Make sure that when you mark out screw positions the screws will not come into contact with the liner or liner-lock. Any warranty for a mechanically damaged liner will not be covered.



When you have connected the inner top shelving using the stainless steel biscuits, take your time to align top shelving evenly to create a gap between the inner and outer top shelving of a similar size.



Use the 4.5mm x 65mm coated screws to fix down the top shelving. There should be two screws fixed per board at every support point i.e. ring-beam blocks, vertical supports and wall sections.

Top Tip: Use the screw digger bits supplied with the fixing kit to pre-drill to a shallow depth and slightly counter sink for a nice clean finish. Also you can use timber wedges or a clamp to open or close gaps in the top shelving if a board has a bend in it.

Installing The Linerlock





We have used white Linerlock in these images as it is easier to view in the instructions rather than the black Linerlock supplied with your pond.

Linerlock is a plastic extrusion that is used to secure the pond liner. This needs to be fitted to the inside of the pond around the entire perimeter. When cutting Linerlock either cut it at 45 degrees to fit the corners of the pond or 90 degrees. Other than aesthetics it makes no difference, as once the liner and Linerlock wedge is installed you cannot see the Linerlock. You can use a chop saw, panel saw, or hack saw to do this. Where the Linerlock joins, make sure it is lined up properly at the groove to accept the liner running continuously, without any misalignment. As you can see in this photo the join runs with the groove completely in line.

Pre-drill the Linerlock every 300mm with a 3mm drill bit as this will ensure inserting the screws is much easier and prevent any injury from slipping with the drill, when you are starting the screw. Use the 3.5mm screws provided to fix the Linerlock all the way around the pond.

Laying The Felt Underlay







If there are any protruding fixings or sharp splinters inside the pond at this point, use a piece of underlay tape to cover them up. Do not use any tape other than the underlay tape supplied.

Ensure the pond floor is completely clean from any debris or any other objects. Anything left in the pond can be unsightly for years to come and could damage the liner. Lay the felt underlay out completely covering the pond floor and an overlap up the wall of about 10mm-20mm.

Avoid joining edges together which have been cut on site. Always try and tape two machined edges together. Only use the tape provided, never use any other type of tape. Use a pair of sharp scissors to cut the felt, never use a knife. Ensure the felt does not overlap as this will show through the liner.

Finally trim the perimeter of the pool, by using the back edge of the scissors to score the felt between the pool floor and wall. This leaves a neat line in the felt that you can cut neatly along with a sharp pair of scissors.

Foam Wall Protection





This model includes foam wall protection. This helps protect fish and give a small amount of insulation.

Locate the foam and spray adhensive. Start in one corner of the pond and spray the adhesive on about 2-3 metres of wall section. Start unrolling the foam from that corner of the pool pressing it firmly against the area of wall that you have just sprayed and work your way around the pond repeatedly.

Pay particular attention to pressing the foam firmly into the corners and under the Linerlock of the pond. Avoid getting adhesive on any wall fittings you may have purchased as upgrade. Trim around the perimeter of the pool by running a sharp pair of scissors directly under the Linerlock. Cut the foam away neatly around any pool fittings.



Once you are happy with the foam installation ensure the pond is clear of all debris ready to accept the liner.

Installing The Liner



Before liner installation store the liner in a warm environment to help the liner material become supple.

When installing the liner wear socks inside the pond.



Opposite is an image of Linerlock profile. This shows how the liner bead at the top of the liner fits into the Linerlock, insert the liner bead into the Linerlock and the weight of the liner when it drops will secure the liner in place. Once the liner is installed the Linerlock wedge can be inserted to permanently hold the liner in place.



Unwrap the liner in the pond on top of the felt, start in a corner of the pond, making sure the corner of the liner and pond line up. You may have packing creases in your liner, warm temperatures will help these fade and when the liner is filled with water it will stretch into place. Start by lining the corners of the floor of the liner with the corners of the pond walls, carefully work your way around the pond, taking time to fully insert the liner in the liner-lock and pay particular attention to the corners of the pond. Warming the liner bead at the top of the liner with you fingers making it supple ensure the bead is fully inserted in place.



If you need to adjust the liner position, unhook the top and move it around until you are happy. Your liner will appear smaller than the pond but this will stretch to form a good fit. Creases in the floor can be smoothed out with your feet from the centre to the outside walls.



Before filling you may want to let the liner hang in position. If it is a warm day this will help remove any creases caused by the packing of this product. Once you are happy start filling the pond. This will take a while.

Filtration Board/Pack Assembly Instructions







• You will need to fit the filtration back fitting before you can progress with the liner installation. Make sure you remove the front plate before commencing.









• Insert screws in top and bottom positions. Do not tighten the screw too much, just a couple of turns and leave the crosshairs of the screw pointing North, South, East, West.





• With extreme caution cut the crosshairs of the screw with a sharp knife and push screw through the insertion hole made.





• Before attaching the faceplate add fish friendly silicone to the back.













• You can follow the same procedure whether you are using the filtration plank or filtration pack.

Please Note: The large filtration hole must be fitted a minimum of two planks above the base of the pond to ensure the liner creases are removed first.

Warranty

All wooden products sold by Garden Paradise have the following warranty given by the manufacturer The Garden Timber Company.

Wooden Ponds

The Garden Timber Company gives an extended 10-year parts only warranty on 44mm and an extended 5-year parts only warranty on 27mm wall structure plan only, against wood rot and insect infestation attack.

- **Timber structure walls** 10 year warranty on 44mm OR 5 year warranty on 27mm
- Liner 10 year warranty on the welds on 44mm OR 5 year warranty on the welds on 27mm
- Top Shelving 1 year warranty

Terms and conditions on the wall structure planks and liners:

Original Proof of Purchase must be supplied, along with details of any valid warranty issues with photographic evidence.

All warranties must have been registered at www. thegtcompany.co.uk (to extend to 5 or 10 years as above) within 60 days of purchase date.

This warranty is between The Garden Timber Company and the original purchaser and is non-transferable.

The product must be installed in accordance with the installation manual.

The Garden Timber Company will not be held responsible for removal or reinstatement of any components or accept any responsibility for any consequential loss. Any modifications carried out to our products will void any warranty or claim.

Any warranty is on a pro-rata basis over time e.g. For a 10-year warranty, a problem at 36 months the warranty will cover 70% of the cost of replacement parts on any valid claim. For a 5-year warranty at 36 months the warranty will cover 40% of the cost of replacement parts on any valid claim.

See warranty examples below:

5 Years - 27mm Wooden Ponds

1st Year = 100% Between 12-24 Month = 80% - 60% Between 24-36 Months = 60% - 40% Between 36-48 Months = 40% - 20% Between 48 - 60 Months = 20% - 0%

10 Years - 44mm Wooden Ponds

1st Year = 100% Between 13-24 Months = 90% - 80% Between 25-36 Months = 80% - 70% Between 37-48 Months = 70% - 60% Between 49 - 60 Months = 60% - 5% Between 61 - 72 Months = 50% - 40% Between 73-84 Months = 40% - 30% Between 85-96 Months = 30% - 20% Between 97-108 Months = 20% - 10% Between 109 - 120 Months = 10% - 0% Wooden products use natural materials, any movement or discolouration can be expected. The Garden Timber Company accept no liability for any such occurrence.

Care must be taken to avoid any damage to the product, which may void any warranty.

Any product must remain in its original installation location.

At the installation, where a valid warranty issue may occur, access for inspection must be made available with permission to take any required samples of the product for independent testing.

Our timber products must not be submersed in water. Adequate drainage for our timber products must be in place, to avoid constant wet conditions for the timber. In the form of a shingle soak away or submersible pump if necessary. If our product is partially or fully submerged in ground, then adequate pea shingle should be installed, including a drain off, completely protecting the product from ground water. Failure to protect the timber from such issues will void any warranty.

This warranty covers the timber wall planks from wood rot and insect attack only. This applies only to the infected planks, providing they are returned to our Factory at the consumers cost and risk, any replacements will be arranged in accordance to this warranty and returned to the site of the original delivery.

Any warranty will be void if it is deemed that there has been a failure of regular upkeep of your pond.

If it is deemed that a pond has been left partially or completely empty the liner warranty will be classed as void.

The pond should maintain 80% water level minimum at all times.

Liner warranty will only cover manufacturing defect of the weld, and does not cover any mechanical damage which may arise. i.e. user error cuts, rip etc.

Exclusions include

- Any of our products used outside of the UK are not covered by our extended warranty.
- "Act of god" e.g. fire, flood, lightning.
- Any other accessories that come with our products like plastic sand pit cover or play sand are only warranted to be free from material or manufacturing defects at time of purchase only.
- Any damage caused by livestock animals or persons.
- We accept no liability for any livestock, damage to property or persons due to manufacturing defects.
- Any loss or damage from general wear and tear.
- Failure to comply with local regulations or laws on our products, whether for domestic or commercial use.
- We shall not be liable for and any consequential loss caused to our products by third party products or services.
- These terms and conditions will be construed in accordance with English law, any disputes relating to the terms and conditions shall be subject to the courts of England.

Inspiration

























THE GARDENTIMBER COMPANY

www.thegtcompany.co.uk

Perimeter House, Napier Road, St. Leonards-on-Sea, East Sussex TN38 9NY

Tel: 0800 043 0880

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