

D.I.Y. INSTRUCTIONS FOR FITTING THE SAFADECK GARDEN POND SAFETY GRID

SafaDeck Components

SP01 – Beam clip



The beam clip is used to clip the grid to the beam. Normally one beam clip is located in each corner of the grid, meaning on average 4 beam clips are required for each grid. Beam clips are also placed over any join in the beams.

SP02 – Cut end bumper



The cut end bumper is used to protect butyl and PVC liners from any cut sections of grid. It has a smooth curved side and an open side. The open side has a wider base and a narrower top. It is used in an upside-down position when placing over the diagonal cut sections of grid. It is used in the normal position (opposite) on thicker cross pieces.

SP03 – Cut end support



The cut end support is used in the rare event when a section of grid cannot be adequately supported by beams on either side. It is placed over a section of grid and a length of support cord is passed through the bottom two holes which is then anchored outside the pond using either a stake or a ceiling anchor. Ensure the support cord is taught.

SP04 – Floating beam clip



The floating beam clip is used to attach grids to the first and last beams in the pond. It can be used over the 'star' configuration in the grid. It is also used to attach any additional support beams to the underside of the grid if required. It is clipped into position using a flat screwdriver – the two curved sections at the base of the clip are clipped into place under the flanged section of the upper part of the beam.

SP05 – Grid to grid clip



The grid to grid clip brings together one grid in a lane with its neighbouring grid. They work in pairs and are clipped in between the tabs on the underside of the grid. One grid to grid clip is placed in one direction, the other in the pair in the other direction. When combined in this way, they draw the two grids together ensuring no separation.

SP06 – Beam cleat



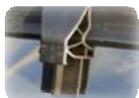
The beam cleat is used to cap off the end of the support beam. After the beam is cut to length, without the beam cleat it would pose a threat to the pond liner. The beam cleat has a central hole, through which the support cord is passed.

SP07 – Foot



The foot is inserted into the bottom of the leg section and rests on the base of the pond. Watch for stones and other sharp objects between the underside of the foot and the liner. The leg is attached to the foot by gently forcing the leg down upon the top of the foot and simultaneously turning the leg until it is in position.

SP08 – Sliding support



The sliding support joins the top of the leg to the underside of the beam. It slides along the beam so that a support leg can be positioned at any convenient point. Usually a sliding support will be placed as near to the each end of beam as possible and at approximately every metre in between.

SP09 – Joiner



The joiner helps position one beam into the next. It is not a load-bearing component. Load is taken by the support leg positioned at the join. The support cord passes through the joiner as shown.

SP10 – Grid



The grid, made from 30% glass-filled nylon, measures 49cm wide and 59cm long and is 3cm deep. Holes are triangular 14cm x 14cm x 16cm. Beams run underneath the two longest edges and so are spaced 49cm apart. Grids running between two beams form one 'lane' of grids.

SP11 – Support beam



Used to support grids in place. Can be cut to the desired length or extended by use of the beam joiner. Note that the recess in the top of the beam is designed to take the longest edges of each grid or the tabs on the underside of the outermost grids.

SP12 – Leg



The picture shows the leg being cut to length by tree loppers. Legs are supplied in 1 metre lengths, which is the deepest pond that can be protected without a special order being placed. A leg should be placed approximately every 1 metre along each beam and preferably at each end of the beam and at each join.

SP13 – Support cord/rope



The cord passes all the way through each beam and is anchored outside the perimeter of the pond using either ground stakes (SP15) or ceiling anchors (SP16). Excess cord is then cut away. Alternatively, a hole can be drilled 7cm from the end of the beam, on the underside, and a shorter length of rope used and a simple knot tied.

SP14 – Support cord cover



It may be necessary to protect the support cord from lawnmowers, grass trimmers or animals. This is achieved by using the support cord cover which is passed over the exposed length of cord and cut to length. It is not always required but is included in the standard pack.

SP15 – Ground stake



Ground stakes are one of two ways to secure the support cord. These are made from galvanized steel and are 25cm long. The concave face of the stake faces the pond. The support cord passes through the central hole, then into the side hole, over the 'U' shaped cut in the top of the stake and down into the loop created. It is then tightened as necessary.

SP16 – Ceiling anchor



The ceiling anchor is used in pond edges such as brick, solid slab edges or solid stone surrounds. A 6.0mm hole is drilled at the relevant point to receive the ceiling anchor. Tap in the anchor gently to prevent the hole in the anchor from closing up. The support cord is then passed into the hole and a simple knot secures.

Introduction

The SafaDeck is a modular grid system, designed to fit into any garden pond, to protect children under the age of five from drowning.

Grids are clipped onto black aluminium beams which are suspended into the water by internal support cord, anchored at the pond's edge. The beams are supported by vertical legs, fixed under the beams at appropriate intervals.

The SafaDeck is neither a toy nor a children's play platform. It is an emergency safety barrier for the under 5's, and is not to be walked upon except in emergencies. Under no circumstances can the SafaDeck be seen as a replacement for constant adult supervision.

The SafaDeck, in its standard form, will fit any pond up to a depth of a metre. Ponds that are deeper than this require longer legs and an additional leg-strengthening component to be supplied. Because the SafaDeck grid can be cut to any shape, there are no pond shapes that can't be successfully covered.

Make sure you familiarize yourself with all components as their incorrect use or positioning could adversely affect the strength of the grid. All instructions must be strictly followed in order to maintain the integrity of the SafaDeck.

Fitting the SafaDeck

It is the responsibility of the person installing the SafaDeck to ensure that satisfactory protection exists once fitting is complete. Please read these instructions carefully before attempting to fit the SafaDeck and take care to avoid injury during fitting procedures. To avoid suffocation keep polythene bags away from babies, young children and pets. Do not attempt to fit the SafaDeck until you know that you have sufficient components to cover the entire pond surface. Also remember to take care when working in or near water – check depths before entering the pond and ensure electricity supplies are safe – avoiding personal injury is always your initial priority.

Tools which may be required:

- Hammer and flat screw-driver
- Metal cutting saw (manual or electric chop-saw)
- Bolt cutters
- Loppers or other pipe cutters
- Scissors or sharp knife
- Eye and ear protectors, gloves and other personal protection equipment as deemed necessary according to best practice
- Spirit level
- Waders
- Drill with a 6.0mm masonry drill bit
- Masking tape



Where to start:-

It is recommended that before any work is undertaken, you consider the following:

Where do you require the SafaDeck to be fitted in relation to the water surface – above or below? Any amount of water can be dangerous to young children so we **STRONGLY RECOMMEND THAT THE SAFADECK IS FITTED ABOVE THE WATER SURFACE**. What about abnormal water levels? Has there been a drought or excessive rainfall? Do all agree on where the grid should be fitted? If the grid is fitted below water then it is less effective as a safety device and as such we cannot be held liable for any accidents in the event of the grid being installed below water. Once the positioning of the grid has been agreed work can commence.

The SafaDeck can be fitted either with the pond full of water or empty.

If the pond is full of water, you will need to get into the pond and hence will need appropriate clothing. Ensure waders are deep enough for the pond in question. Working in water is not as easy as working in an empty pond but the main advantage of doing so is that the water forms an accurate spirit level on which to base the levelling of the grid. If you choose to empty the pond before fitting the grid, you will have to consider the welfare of any fish and maintaining the pond balance once complete. Working without water means the greatest of care is needed to ensure the SafaDeck is level throughout – when water is replaced your errors will soon be revealed and adjustment will prove necessary. In colder conditions, consider taking out some of the water, say 20 centimetres, so that hands are above water when working.

Having checked on all required components being in place and agreed where to fit the grid, it is then necessary to decide on how best to install the safety grid.

There are times when the positioning of the SafaDeck is obvious, and others when it is less so. Remember that the grid is going to form part of your garden and may well affect the aesthetic look of the surrounds. Often the best practice is to have the beams either parallel to or at right angles to the house wall. However, remember that the support beams should ideally be positioned across the width of the pond.

There may be times when the base of the pond is so horizontal and the sides of the pond so vertical that support legs placed at the end of each beam provide sufficient strength to the beams that attaching them by support cord as well seems unnecessary. The reality, in this instance, is that the deeper the pond, the more the support cord forms an integral part of the system. Avoiding the use of the cord is a skill gained with experience and hence for safety's sake the cord is best used at all times.



Make a start at one edge of the pond. The very first beam may need to be cut shorter or extended by the use of a beam joiner. This first beam will be connected to the underside of the grid using floating beam clips. Before attaching the grid to the beam, thread a length of support cord through the beam, leaving an excess of cord beyond the length of the beam - you will need to anchor this cord outside the edge of the pond at a suitable point so try to determine how much extra cord will be required.



If the base of the pond directly underneath where the first beam is to be positioned is horizontal, you will be able to place one or more support legs onto the beam. If this is the case you need to decide how many legs are to be attached to this first beam. For each leg you will need to slide a sliding support onto the beam at this point, for later use. As an approximate guide, a support leg is used for roughly every metre of

support beam. After placing the support cord through the beam, attach a beam cleat into both open ends of the first beam.



Passing the cord through this beam cleat is made easier by using masking tape wound tightly over the end of the support cord. Tie a knot in the rope at each end of the beam once you've inserted the beam cleats. Grids are placed onto the beam lengthways (i.e. the side of the grid that is 59cm long).

When you are ready to attach the grid to the first beam, place the tabs on the underneath of the grid into the top channel of the support beam. Then attach the grid to this first beam by using floating beam clips over the star configuration and clipped into place on the beam. You may use a flat screw-driver to allow ease of fitting. This means that the very first beam will be closer to the second beam than the second beam is to the third. Likewise the last beam will be closer to the last but one beam. So – all beams are 49cm apart, except for the first and last beams, which are closer than 49cm. At least 2 floating beam clips are required per grid. Use floating beam clips on the cross pieces over the beam as well for extra support. The second beam runs underneath the longest edge of the grid, parallel to the very first beam.

Note that if you have to extend the length of the beam using a beam joiner, do not push the joiner into the beam without first threading the support cord through the joiner. Please note that the beam joiners are not load-bearing. For maximum strength when joining beams, you should place a sliding support on the join with a supporting leg attached. Also place additional beam clips around and on the join in the beam for extra strength.

Support cord is anchored outside the pond by ground stakes, (for earth, grass or loose rocks), or ceiling anchors (for walls or large secure rocks). Ensure that you have the appropriate cord fixings for the pond and then proceed to consider where and how best to anchor your support cord. It is not necessary at this stage to finalise the fixings of the first beam. You may prefer to anchor the cord temporarily until such time as you feel confident of its location.

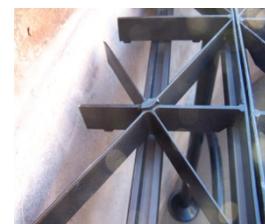
Cord cover is also provided to protect any exposed sections of support cord. This can be cut to size and then the support cord threaded through.

Ground stakes require the concave side to face the pond. Pass the support cord through the middle hole, round the back and into the side hole and then over the 'U' cut and back down through the loop at the back of the stake. This then will form a self-tightening knot for your later adjustment.



Grids are clipped to the beam using beam clips. The beam clips are placed in each corner of the grid. Beam clips are placed tab down. The top of the clip needs to be placed on top of the grid and then the clip pushed into place onto the beam.

Where two grids meet you will need to place two of the larger grid to grid clips in the middle of the 49cm side of the grid. These clips are also placed tab down and the top of the clip must be in place before clipping the bottom. The grid clips are designed to work in opposing directions, placed next to each other. The grid clip cannot be placed where there is a tab on the underside of the grid.



Grids should be placed so that the diagonal lines in the grid match up across the whole of the grids - i.e. consistent throughout the grid work. Grids can be staggered to minimise waste. As long as the diagonal lines are maintained, the grid can be positioned anywhere on the beam.

Continue to build up the SafaDeck in the water across the pond. All supporting legs should be positioned to maximise stability. These legs need to be spaced out at appropriate positions around the pond, where the base of the pond is flat. A support leg may not be as effective if it sits on a slope. At the base of the support leg is attached a foot. This is used to prevent damage to liners and provides stability to each leg. Whilst this foot should prevent any damage to the bottom of the pond, be careful to remove sharp items such as stones etc. under where the foot will rest. Into the top of the support leg is inserted a sliding support which runs along the beam. Using the leg itself, measure the depth of the pond where the support leg will rest and cut off any excess, making sure that the upper surface of the grid remains level. Watch to ensure the top of the leg rests into the shoulder of the sliding support.



Check again that the area of pond base is level at the point where the foot rests. The SafaDeck will be more secure if a single grid crosses any joints in the beam. It is recommended that all legs supplied are used.

Grids that are at the edge of the pond may need to be cut down. Offer the grid into place and mark the sections of grid that need to be cut with chalk. Using a set of bolt cutters will ensure an easy and neat cut to the grid. A junior hacksaw can be used as an alternative.

Once you have worked your way across the length of the pond you will need to finish the last lane of grids. In the same way as you started with the very first beam being placed under the grid, so will the very last beam be positioned underneath the grid (i.e. not along its edge). The grids may need to be cut down in this very last lane.

Measure how long you need the beam to be and saw it to length. (Remember that this last beam will sit under the grid on a line of tabs on the underside of the grid.) The tabs refer to the projections on the underside of the grid. As with all beams, this beam needs support cord to support the lane of grids. If possible try to add supporting legs. This beam is again held in place by floating beam clips.

Final adjustments can then be made to ensure that the grid lies level with the water surface by adjusting cord tension and possibly the length of some legs.

Cut sections of grid should be protected by curved bumpers, which ensure cut ends of the grid do not damage pond liners.

These bumpers can be used one way for thicker cut sections and upside down for the thinner diagonal cut sections. Note that it may be necessary to remove the underside tab near to the end of the cut section, in order to fit the curved bumper.



Ponds surrounded by fixed slabs are best protected by the removal of mortar between the slabs using an angle grinder. The channel created provides a means for receiving the support line which is then re-cemented once complete. Remember to secure the line by retention stakes driven into the ground. If you have a thick and secure set of slabs around the pond you may prefer to use the brass ceiling anchor into either the vertical or horizontal faces of the slab. For grass edges, simply cut a trench in the turf and sink the rope cover into the

trench and re-turf.



If you are securing the support line with ceiling anchors, you will need to drill a suitable hole with a 6.0mm masonry drill bit. Then gently tap the ceiling anchor into the hole, leaving only the hole in the ceiling anchor exposed. To ensure that this hole remains open, you can temporarily place a spare ceiling anchor into this hole whilst tapping the fixing into place.



The support cord is then passed through the hole in the ceiling anchor and a simple knot tied. Cut off any excess line above the fixing leaving a small excess for tightening if necessary.

Any unsecured or small cut-down section of grid can be supported by cut end supports (SP03). The support cord is taken from an additional line fixing to the cut end support. The support cord is passed through the holes in the cut end support, and a simple knot secures. Cut end supports can only be fitted within complete triangles.

Extra support can be provided to cut sections by using a small piece of beam connected to the underside of the grid using floating beam clips and an extra leg. An alternative method which works well is to drill a vertical hole down through the centre of the star configuration on the grid and pass support cord through the hole, tying a knot on the underside and taking the cord to a supported position outside the edge of the pond.

All cords should be secured, and ideally hidden and protected to prevent accidents. Ground stakes can be fully hammered into the ground once the grids have been correctly positioned. Make sure that the support cord is fully tensioned to eliminate any subsequent movement of the grid work.

Completion

It is your responsibility to make sure that the SafaDeck has been correctly fitted. The SafaDeck has been designed to withstand the weight of a small child falling onto the grid. The grid work should fit the pond neatly so that all areas of pond surface have been made safe. This means that close attention must be paid to the pond edge to prevent a young child entering the water. No gaps greater than 80mm should be permitted between the SafaDeck and the edge of the pond. The grid will be even more stable if the edge grids can be taken up to the pond edge, without causing damage.

It is strongly recommended that you test the SafaDeck to your own satisfaction, ensuring all fitting procedures have been carefully adhered to. Take care not to abuse the grid unnecessarily. The SafaDeck is UV stable and should be effective for years to come but as with all security measures it is vital to regularly check that it remains correctly installed to ensure maximum performance. If the grid is interfered with in any way it must be put back in the same position as originally fitted.

Do not forget that children can drown in only a few inches of water and therefore a close watch must be made on rising water levels. Grid sections can be removed individually to allow access to the base of the pond for cleaning etc. A small coin or flat screwdriver (or an upside-down grid to grid clip) can be used to tease the tab on the child-proof beam clips away from the beam. (These clips are heavier than water so don't drop them!) Replace the grid section as soon as maintenance is complete.

Careful adult supervision is the only way to guarantee that pond accidents do not occur. Whilst the designers of the SafaDeck have endeavoured to create an effective safeguard against pond accidents, the company cannot be held responsible for any accidents that do occur.

DO NOT ALLOW CHILDREN TO PLAY ON THE SAFADECK. CHILDREN MUST BE KEPT AWAY FROM WATER AT ALL TIMES.

IMPORTANT NOTES

- ✓ IF THE SAFADECK IS FITTED BELOW WATER LEVEL THEN THERE IS A DEGREE OF POTENTIALLY HAZARDOUS WATER WHICH CAN STILL PRESENT A RISK OF DROWNING. CHILDREN CAN STILL DROWN IN ONLY A FEW INCHES OF WATER.
- ✓ DURING THE FITTING PROCESS, DRILLING, SAWING AND CUTTING CAN ALL POSE A RISK TO THE INSTALLER. IT SHOULD BE UNDERSTOOD THAT THE INSTALLER TAKES ALL NECESSARY STEPS TO AVOID PERSONAL INJURY, SUCH AS THE USE OF PROTECTIVE GLOVES KNEE-PADS AND EYEWEAR
- ✓ IF THE SAFADECK IS NOT FITTED IN EXACT ACCORDANCE WITH THESE INSTRUCTIONS THEN THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR ITS EFFECTIVENESS
- ✓ DO NOT ALLOW CHILDREN OF ANY AGE TO WALK OR PLAY ON THE SAFADECK
- ✓ PERIODIC CHECKS MUST BE MADE ON THE GRID TO ENSURE ALL COMPONENTS ARE IN PLACE AS PER THE FITTING INSTRUCTIONS

