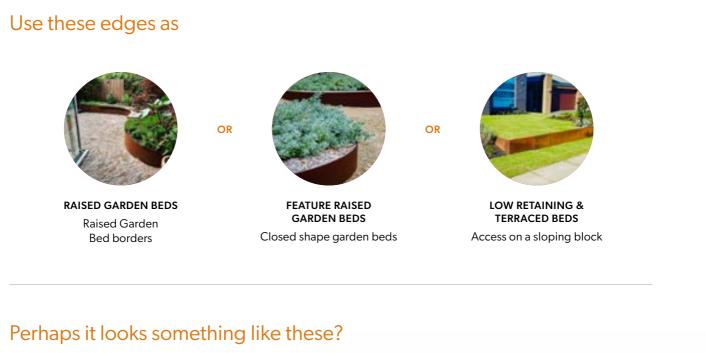
400mm Raised Garden Beds

For curved and straight Raised Garden Bed situations.

Do you know what Raised Garden Bed product is best for your project? Let's figure that out together here!



Straightcurve® Product Catalogue | Page 1 - 400mm Raised Garden Beds



Straightcurve® Flex Raised Garden Bed - 400mm



Straightcurve® Zero-Flex Raised Garden Bed - 400mm

How do you choose the 400mm Raised Garden Bed that's best for you?

We have solutions for curved and straight Raised Garden Bed situations. Use the below table to consider which is the best option from our range for your project. It's your call and we hope these recommendations makes it easier!

I'm looking for	We recommend for this		
	X		and the second second
	Flex - 400	Rigid - 400	Zero-Flex - 400
Something I can do myself	~	\checkmark	\checkmark
A super high-quality raised garden bed that's stylish and strong	~	~	~
Tree rings	~	×	×
Something rigid that helps me to create a straight run	×	\checkmark	\checkmark
A straight edge that will stay true and won't waver	×	×	~
An edge ideal for linear designs with plenty of corners	×	×	~
Something with a square shaped top edge making it appear boxy	×	×	~

How about this!? It's also possible to combine styles, as our Flex Raised Garden Bed panels and Rigid Raised Garden Bed panels are join and profile compatible.

Product overview

ROUNDED TOPS AND SAFETY FEATURES

The smooth, rounded tops and edges assist safe handling. When installed, all joins/fixings are internal so that the exposed top and front present as a smooth top edge and continuous fascia.

SAFER AND CLEANER HANDLING

We recommend wearing gloves as the manufacturing process can leave residual oils/dust and our products can get hot when exposed to sunlight. Our products are shipped in bundles, when lifting bundles handlers should be mindful of their carrying capabilities. Single items are easy to carry for one person (see product weights).

ABOUT WEATHERING STEEL

The manufacturing process of weathering steel leaves the surface in a dark, almost black state. This dark 'finish' is an oxide layer that forms during the hot rolling process. The weathering process needs to break this layer down first before the desired protective patina layer can be established. You can expect some inconsistency in the patina formation because the thickness of the oxide layer varies; it'll appear spotty with some areas going orange and others still black.

The patina develops naturally with periods of wet and dry, and both phases are key for its steady formation. Do not wet continually without allowing time for thorough drying. A faster patina formation can be aided by cleaning the surface with soapy water to remove oil residue, but anything harsher is not advised as it can be detrimental to patina development and consequently, reduce product lifespan. Some rust solution products are safe to use as these 'build a surface patina' rather than just accelerating rusting.

WHAT IS A PATINA

Patina is not the same as rust. All rust is patina, but not all patina is rust. Patina is a chemical bond between various elements and usually oxygen. It can be found on most metals with the exception of 8 inert (noble) metals like gold or silver. 'Normal' rust is iron-oxide, the patina referred to above is mostly a bond between copper, phosphorus, chromium, nickel, iron and oxygen. You may wonder, how does water feature in it? Water acts as an electrolyte, but that's a different story. In the end, the patina formed on weathering steel is a dense layer that doesn't flake or allow oxygen through. Therefore, once formed, the oxidation process slows down dramatically.

WILL THE STEEL STAIN MY PAVERS OR DECK?

This can occur in the early stages of rusting but can be avoided with care, such as by protecting nearby surfaces while the patina establishes. The worst cases of this you will see involves mild steel because the rusting carries on unabated. With weathering steel this should only happen when first developing a patina or if rushed artificially (sped up with acids/salts) to achieve faster colour change. What you can do as an excellent strategy is pre-rust the edging before installing to have a stable early phase patina there already. This doesn't need to take long if you procure a rust solution recommended for steady patina formation.

LONGEVITY

Our products are of the highest quality ensuring longevity in the given environment. For further information please refer to the "Longevity Guide" and "Product Care Guide" on our website.

PAINTING, SEALING AND POWDERCOATING

Our galvanised products are suited to painting, but the surface should be thoroughly prepared (using acetone wash), and sealed with a metal primer (etch primer is very good) to maximise topcoat adhesion.

Powdercoating is a much more durable/hardy choice, and can be requested for large projects with lead times/costings supplied. It is worth noting that not all powdercoating performs the same, we use and recommend Interpon powder from AkzoNobel for assured quality and maximum endurance and suggest you request the same. It's also worth asking first to see a sample from your chosen powdercoater specialist. Note that, as for painting, galvanised products should be used whenever powdercoating.

100mm

Another question we get relates to freezing the colour (or patina development) at a certain stage. That's possible using a transparent sealant suitable for steel. Keep in mind that the colour will change when applying a sealant, it'll get a 'wet' look. Be sure to test this in a small inconspicuous area first before fully committing. This will require reapplication once a year.

WHEN IS CONCRETING AROUND THE ANCHORS AND FIXING SPIKES **NECESSARY?**

For an install on sandy/soft/shifting ground conditions it's important to set the foot-stabilising galvanised fixing spikes and ground anchor stakes or posts into some concrete for extra hold. If you're not sure about the ground condition, the firmness of the subsurface ground when the spikes are hammered in is a good indicator as to whether concreting is needed; they need to gain purchase and feel rigid. The 400mm Raised Garden Beds experience a considerable outward force acting upon them so if in doubt, use some concrete.

HOW TO POSITION THE EDGE

These Raised Garden Beds have a front facing side with discreet join seams, while the back side retains the actual garden fill, meaning all joins and bracing systems are hidden.

Be mindful also that a garden bed can settle at lower than the install levels and may require topping up later to maintain the look initially achieved with your Raised Garden Bed. This top up practice can also increase lifespan, as the protective patina formation may be inconsistent in previously buried portions.

HOW DEEP DO I BURY THE EDGE?

For all these products there is no need to bury the edge. Traditionally, it has been necessary to bury up to one third of the panel when using steel for raised garden beds, but the lockdown foot design means that is not required and you get to see the full face of the panel. You effectively get the same result as the old ways, with a third less steel!

That said, sometimes these products are used as a partly buried raised garden bed edge. This is particularly effective in sloping situations where the ground meeting the edge is not level, so the degree of panel showing changes along the run of the raised garden bed.

WHY DO WE SUPPLY AND RECOMMEND **TEK SCREWS?**

When fixing the ground anchor sets to the edge use Tek screws for their self-tapping (self-drilling) abilities. This is an easy, fast and strong method. The long lasting, grey Dacromet Tek screws are best for all the buried screw locations of these products.

ADVANTAGES

- Continuous smooth top square or rounded edges
- Corners available or easily made in situ with Flex and Rigid lines
- Up to 3x faster installation
- No welding required
- No burying the edge required
- No Experience/training needed
- Designed for ease of use

Straightcurve[®] Flex Raised Garden Bed Panel - 400mm

FL400WS WEATHERING STEEL | FL400GS GALVANISED STEEL



EDGE STYLE

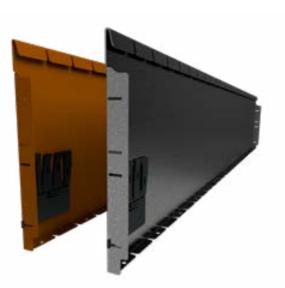


FINISHES Galvanised Steel Weathering Steel For smoothly curving Raised Glarden Beds that look great and hold position once shaped & installed.

Product specifications

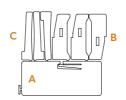
TECHNICAL SPECIFICATIONS

Length	2160mm
Top edge thickness	8mm
Steel plate thickness	2mm
Weight per length	16kg
BULK BUYING	
Pack quantity	20
Bulk pack weight inc. pallet	349kg



SOLD AS SET INCLUDING

- Joining set includes 1 X join bracket (A), 3 x slider (B), 3 x wedge (C)
- 5 x Fixing spikes, galvanised, 300mm long
- 2 x bracing ribs (attached to panel/movable)



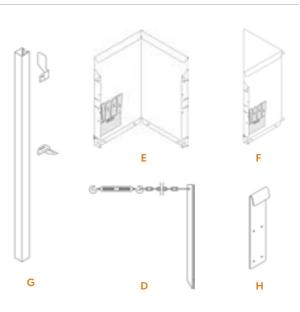
ADDITIONAL ACCESSORIES

REQUIRED

D Universal bracing set as ground anchor post alternative (turnbuckle/cable or chain/T-stake)

OPTIONAL

- E Corner piece (90° right angle / arm lengths: 255mm)
- F Reverse corner piece (270° L-shape / arm lengths: 255mm)
- G Ground anchor set 1100mm (Tek screws required)
- H Join part for offcuts (Tek screws required)



Flex Raised Garden Bed Panel - 400mm Installation Guide





- Ground anchor set 6 x Tek Screws (12G x 16mm)
- Join part for offcuts 8 x Tek Screws (12G x 16mm/ zinc colour for WS)

RECOMMENDED TOOLS

- Ground leveling tools
- Metal hammer
- Rubber mallet
- Cordless drill and Tek screw bit (for accessories G and H)
- Angle grinder (required if modifying lengths or fashioning corners/ends)

PREPARATIONS

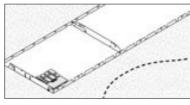
The Flex Raised Garden Bed requires NO digging in as its feet are secured to the ground surface. The base should be smoothed/ leveled for the edge to sit flush on the ground during installation. Any obstructions should be removed or re-routed. It can be installed on all level ground types including concrete surfaces (where packers are used to sit edge off ground to allow drainage). It is useful to have some cardboard or board to place under joins when connecting with the panel face down on flat ground. Grass and debris likes to get caught in the tight seam!

DO...

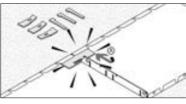
- Ø Join all lengths in place and perfect the line before finally fixing in position.
- ⊘ If using a pre-made corner start from there and work back.
- Score an intermittent line rather than one deep score line if making corners.
- Sollow the instructions carefully and do it with a friend If making a two panel ring.
- So For circular beds backfill evenly for equal outward pressure.

DON'T...

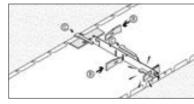
- 8 Use for straight lines, instead use Rigid Or Zero-Flex options.
- Solution Forcibly bend. Take care and gently flex the edge to shape.
- Solution Stake or brace your edge once joined unless making circular beds (less than 3m diameter).
- Accelerate rust with acids or salts (but soapy water is ok!)



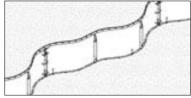
STEP 1 - Mark edge line on ground and layout edge pieces nearby.



STEP 3 - Join using the joining set, break the pieces apart first by hand and insert join bracket (A) securely under the top lip (centred). Press it against back of panels (use a metal hammer to firmly lock in).

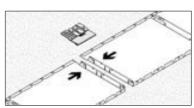


STEP 5 - Hammer the wedge in firmly. Repeat step 4 for middle and top slot using the remaining wedge and slider sets.

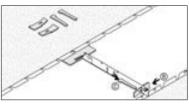


STEP 7 - Introduce and join further lengths (or joined pairs of lengths), butting them against the now standing edge, connecting them as you go.

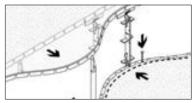
Straightcurve® Product Catalogue | Page 7 - 400mm Raised Garden Beds



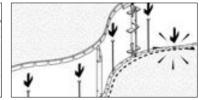
STEP 2 - Place first two edges front face down on the ground with ends touching and with join slots aligned.



STEP 4 - Next, insert a slider (B) through adjacent bottom slots with it's 'feet' against the edge. Knock it through fully so wedge (C) can insert and lock in the slider.



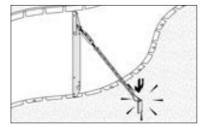
STEP 6 - Set these two edges upright and flex to position where desired, use fixing spikes as temporary placeholders.



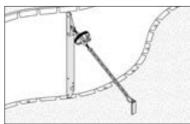
STEP 8 - Check the line, then hammer all fixing spikes (5 per length) through foot tab holes

CHOOSE YOUR BRACING METHOD

UNIVERSAL BRACING (TURNBUCKLE/CABLE OR CHAIN/T-STAKE)

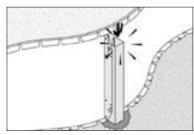


STEP 9A.1 - Using the universal bracing set, hammer in the anchoring stake and connect to bracing rib with cable or chain and turnbuckle taut.

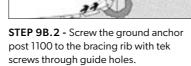


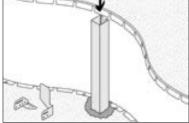
STEP 9A.2 - The turnbuckle is then used for fine vertical adjustment.

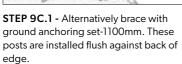
ANCHORING SET

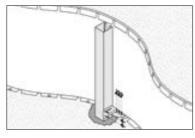


STEP 9B.1 - To stake, hammer to ground anchor post in tightly adjacent a bracing rib and close against the bottom foot.



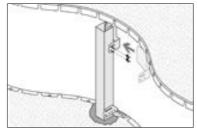






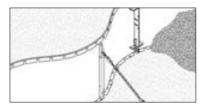
STEP 9C.2 - Once posts in position, screw the fitting set foot piece through guide holes to join the post and edge at the foot.

Straightcurve® Product Catalogue | Page 8 - 400mm Raised Garden Beds



STEP 9C.3 - Fitting the top piece allows adjustment of the vertical, check carefully before final screwing to post.

CONTINUE TO FINISH

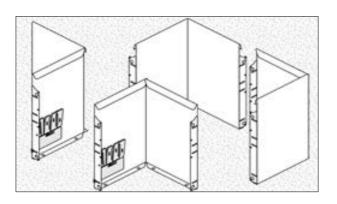


STEP 10 - Back fill your Raised Garden Bed to finish.

Creating corners

PRE-MADE CORNERS

Pre-made corners with 255mm long arms are available for purchase and include the standard joining set. There is a standard 90 degree right angle corner and a reverse corner for turnbacks such as when making an L- shape. It's difficult, but the angle of these pre-made corners can be adjusted by applying considerable force using ratchet straps or other means.

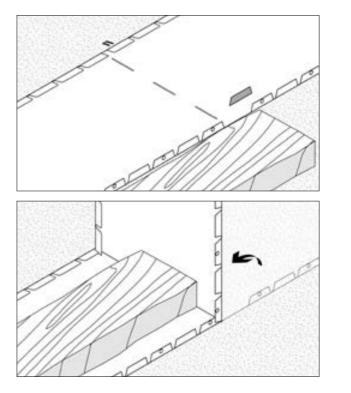


MAKING YOUR OWN CORNERS

To make a corner yourself you will need to use an angle grinder. Be sure to operate safely with all suitable gear.

- Mark a vertical line down the back of the edge directly beneath a top edge notch space where the corner fold is needed. With the angle grinder score the line in three places sufficiently to create a fold line.
- 2. Also cut a gap in the top lip and remove a bottom foot tab on one side of the fold line to allow room for bending in.
- **3.** Bend strongly by hand; using a block of wood close to the fold to form the bend against helps.

For reverse corners ($\sim 270^{\circ}$) a fold line will need to be cut in as above. Also raise the height of the notch groove to the top of the lip neatly to aid the bend. No other cuts are required.



Creating circles

CIRCLES & CURVE CAPABILITIES

Connecting edge panels makes standard ring sizes. Design for complete edge lengths of 2 or more to give the desired diameter. Here's our standard sizes.

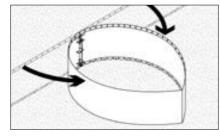
Standard Circle diameters

No. of panels:	2	3	4	5
Diameter:	1.37m	2.06m	2.75m	3.44m

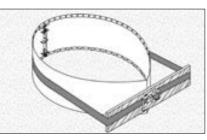
In terms of curve capabilities, the 400mm Flex Raised Garden Bed Panel has a minimum radius achievable of around 700mm. It is designed to allow this degree of flex and no more. This is also why you cannot make a ring with one panel, the two panel ring is the smallest possible. If the Raised Garden Bed face makes a concave curve the back of the join flanges can gap slightly. To counter this, there are some pilot holes at the back edge of the join flange. Screw through these with Tek screws before creating the concave curve.

HOW TO MAKE A TIGHT CIRCLE (D:1370MM) WITH TWO EDGE PANELS.

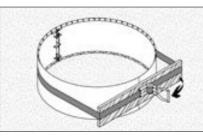
Require 5m ratchet strap and sturdy rectangular board (recommend 600-1200mm wide X edge height). This construction is best done with two people.



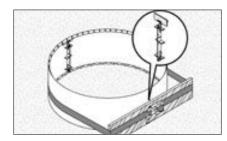
STEP 1 - Connect two panels with joining set, then pull ends in to meet in teardrop shape.



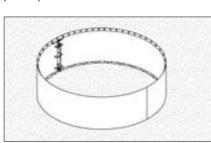
STEP 2 - Place ratchet strap around midriff and over the board, with the board positioned to pull in open end.



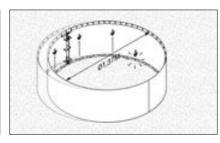
STEP 3 - Ratchet in until ends are flush, and fully align join flanges with gradual ratcheting.



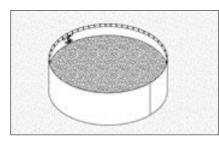
STEP 4 - When the edge end join flanges align perfectly, use joining set to lock together.



STEP 5 - Release ratchet and unstrap, it will be slightly oval in shape.



STEP 6 - Correct by hand to desired ring shape, measuring diameter (1.37m) and pin the feet to hold as you go. Use a rubber mallet to finesse shape.



STEP 7 - That done, fill evenly, there is no need for bracing this self supporting circle.

Note: For three or more panels, two people can simply pull into shape and connect, without the need for ratchet approach

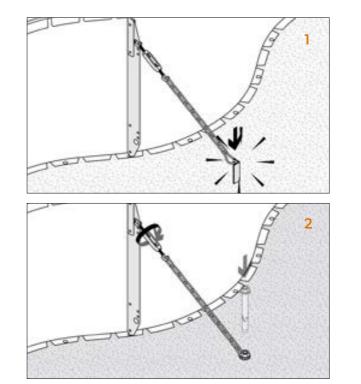
Bracing methods

BRACING ON VARIOUS HARD SURFACES

The Universal Bracing Sets are best suited for these conditions. Simply fit the turnbuckle with cable or chain to the pre-fitted bracing ribs and anchor back to the ground. Alternatively, the 1100mm ground anchor sets can be used on hard surfaces that allow a post hole.

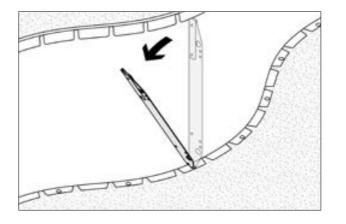
- The stake that comes with the Universal Bracing Set is of a star picket style and will penetrate very hard surfaces, as do the fixing spikes that lock in the feet.
- On concrete, a bolt down method can be used in place of the stake, anchoring the cable or chain with a DynaBolt[™]. Bolt the foot holes in place with an 8mm DynaBolt[™], but first introduce packers to raise it slightly for drainage.

TIP: When using the Universal Bracing Sets, securing the anchor point to alternative structures such as walls or fences is also a workable solution.



HOW TO MOVE A BRACING RIB

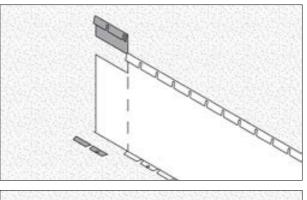
It's easy to move the bracing rib if it is located above an obstacle preventing staking there or where access to the rib will be difficult. Simply loosen and remove the bracing rib by knocking it sideways near the top with a hammer. It can then be refitted in a new place, inserting the base nub into a bottom foot tab hole first, and then tapping the upper part of the bracing rib with a hammer firmly to return it to a vertical position tight behind the top lip.

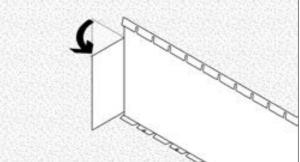


CREATING CONNECTION TABS OF YOUR OWN

To fix one end to a wall or other solid feature you can fix the folded back flange on the end of the panel to that surface. Simply bolt or screw as appropriate to fix it strongly.

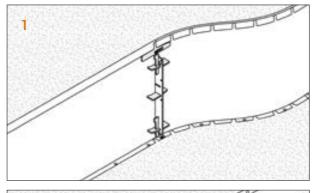
If the edge panel is too long to do that, you can both shorten and create a join tab at the same time with your angle grinder. To do so measure carefully first, then remove the extra top lip portion and create the fold back piece by the score and bend method as shown. The tab can then be screwed internally to the surface it meets, which is sometimes another piece of Straightcurve[®]!

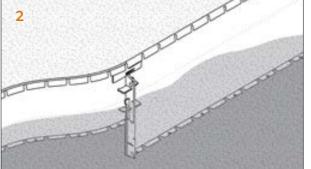




COMPATIBILITY AND WORKING ON SLOPES

- The 400mm Flex Raised Garden Bed Panel is compatible with the 400mm Rigid Raised Garden Bed Panels. This allows them to work in combination.
- 2. In fact, join slots align across all Flex or Rigid panels (240/400/560mm) so that a continuous top edge occurs if different heights are joined together. This across height compatibility can be used to advantage with Raised Garden Beds on a slope. On the lower part of the slope the Raised Garden Bed run may need taller panels with a greater edge face visible due to the slope falling away, with panels of lesser height required further up the bank. It takes some careful planning, but can look very effective, adding volume and height to a bed while reducing the amount of steel used in the project overall.



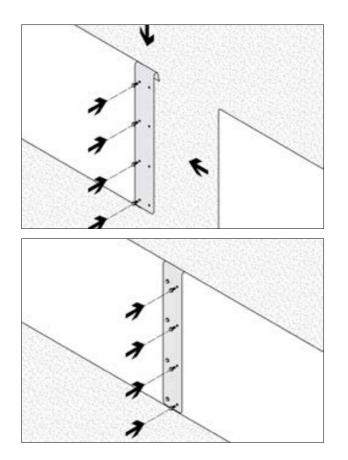


HOW TO USE A PANEL OFFCUT

When a length is shortened with an angle grinder it loses the join flange. To solve that problem we have a Join Part For Offcuts. This is simply screwed to the cutaway end (through guide holes in join part) and overlays the length it is joining. Further screwing sees both panels neatly connected.

This overlay Join Part does mean screws are visible on the face of the Raised Garden Bed, but it is helpful with perimeters that require a part length to meet or when making regular shaped beds where the side length is predetermined. It also means no offcuts are wasted!

Some tips here are to either place the join part in the least conspicuous spot and use Zinc Screws which blend in as they rust over (for Weathering Steel), or make a feature of it by adding more Join Parts to create a pattern. With that approach, you may even choose to substitute polished bolt heads in place of the discreet screws.



Straightcurve[®] Rigid Raised Garden Bed Panel - 400mm

RL400WS WEATHERING STEEL | RL400GS GALVANISED STEEL



100mm

EDGE STYLE

FINISHES

Length

Top edge thickness

Steel plate thickness

Weight per length

BULK BUYING

Pack quantity

Galvanised Steel Weathering Steel

For Raised Glarden Beds with straight edges

150mm

100mm

75mm

Bulk pack weight inc. pallet

- SOLD AS SET INCLUDING
- Joining set includes 1 X join bracket (A), 3 x slider (B), 3 x wedge (C)
- 5 x Fixing spikes, galvanised, 300mm long

Product specifications

2160mm

8mm

2mm

16kg

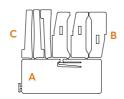
20

349kg

TECHNICAL SPECIFICATIONS

• 2 x bracing ribs (attached to panel/movable)





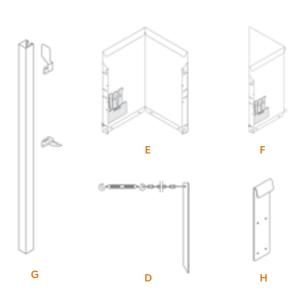
ADDITIONAL ACCESSORIES

REQUIRED

D Universal bracing set as ground anchor post alternative (turnbuckle/cable or chain/T-stake)

OPTIONAL

- E Corner piece (90° right angle / arm lengths: 255mm)
- F Reverse corner piece (270° L-shape / arm lengths: 255mm)
- G Ground anchor set 1100mm (Tek screws required)
- H Join Part for Offcuts (Tek screws required)



Rigid Raised Garden Bed Panel - 400mm Scan or click to watch install video Installation Guide

▶ INSTALL GUIDE



- Ground anchor set 6 x Tek Screws (12G x 16mm)
- Join part for offcuts 8 x Tek Screws (12G x 16mm/ zinc colour for WS)

RECOMMENDED TOOLS

- Ground leveling tools
- Metal hammer
- Rubber mallet
- Cordless drill and Tek screw bit (for accessories G and H)
- Angle grinder (required if modifying lengths or fashioning corners/ends)

PREPARATIONS

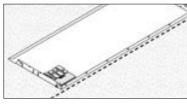
The Rigid Raised Garden Bed requires NO digging in as its feet are secured to the ground surface. The base should be smoothed/ leveled for the edge to sit flush on the ground during installation. Any obstructions should be removed or re-routed. It can be installed on all level ground types including concrete surfaces (where packers are used to sit edge off ground to allow drainage). It is useful to have some cardboard or board to place under joins when connecting with the panel face down on flat ground. Grass and debris likes to get caught in the tight seam!

DO...

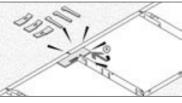
- O Check the line with a string line as you add more panels.
- Ø If using a pre-made corner start from there and work back.
- \bigcirc Score an intermittent line rather than one deep score line if making corners

DON'T...

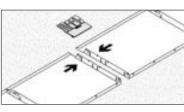
- 🗵 Use for curved line designs, instead use Flex Raised Garden Bed
- 8 Forcibly bend if aiming for a mild curve of a radius exceeding 26m
- S Forget to stake or brace your edge once joined
- Accelerate rust with acids or salts(but soapy water is ok!)



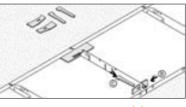
STEP 1 - Mark edge line on ground and layout edge pieces nearby.



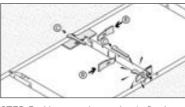
STEP 3 - Join using the joining set, break the pieces apart first by hand and insert join bracket (A) securely under the top lip (centred). Press it against back of panels (use a metal hammer to firmly lock in)



STEP 2 - Place first two edges front face down on the ground with ends touching and aligned.



STEP 4 - Next, insert a slider (B) through adjacent bottom slots with it's 'feet' against the edge. Knock it through fully so wedge (C) can insert and lock in the slider.



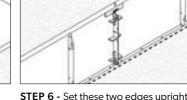
STEP 5 - Hammer the wedge in firmly. Repeat step 4 for middle and top slot using the remaining wedge and slider sets

STEP 7 - Check the line, then hammer all

fixing spikes (5 per length) through foot

De

tab holes

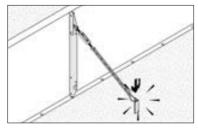


STEP 6 - Set these two edges upright and position where desired

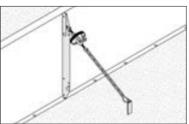
50mm

CHOOSE YOUR BRACING METHOD

UNIVERSAL BRACING (TURNBUCKLE/CABLE OR CHAIN/T-STAKE)

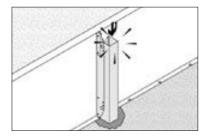


STEP 8A.1 - Using the universal bracing set, hammer in the anchoring stake and connect to bracing rib with cable or chain and turnbuckle taut.

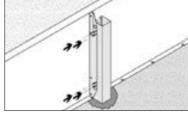


STEP 8A.2 - The turnbuckle is then used for fine vertical adjustment.

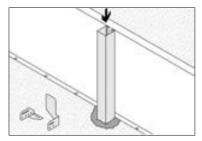
ANCHORING SET

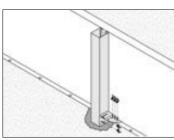


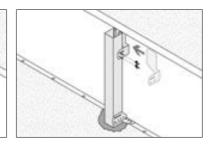
STEP 8B.1 - To stake, hammer to ground anchor post in tightly adjacent a bracing rib and close against the bottom foot.



STEP 8B.2 - Screw the ground anchor post 1100 to the bracing rib with tek screws through guide holes.

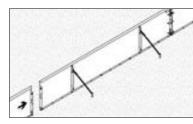






STEP 8C.1 - Alternatively brace with ground anchoring set-1100mm. These posts are installed flush against back of edge

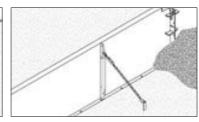
CONTINUE TO FINISH



STEP 9 - Introduce further lengths (or joined pairs of lengths), butting them against the now standing edge and connecting them and bracing them as you go.

STEP 8C.2 - Once posts in position, screw the fitting set foot piece through guide holes to join the post and edge at the foot

STEP 8C.3 - Fitting the top piece allows adjustment of the vertical, check carefully before final screwing to post

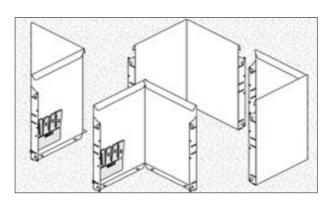


STEP 10 - Back fill your Raised Garden Bed to finish.

Creating corners

PRE-MADE CORNERS

Pre-made corners with 255mm long arms are available for purchase and include the standard joining set. There is a standard 90 degree right angle corner and a reverse corner for turnbacks such as when making an L- shape. It's difficult, but the angle of these pre-made corners can be adjusted by applying considerable force using ratchet straps or other means.

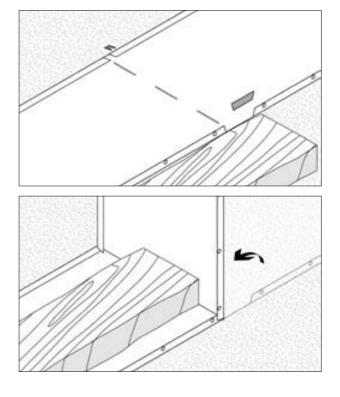


MAKING YOUR OWN CORNERS

To make a corner yourself you will need to use an angle grinder. Be sure to operate safely with all suitable gear.

- Mark a vertical line down the back of the edge directly beneath a top edge notch space where the corner fold is needed. With the angle grinder score the line in three places sufficiently to create a fold line.
- 2. Also cut a gap in the top lip and remove a bottom foot tab on one side of the fold line to allow room for bending in.
- Bend strongly by hand; using a block of wood close to the fold to form the bend against helps.

For reverse corners ($\sim 270^{\circ}$) a fold line will need to be cut in as above. Also make a neat notch cutout in the back of the folded lip to aid the bend. No other cuts are required.



CURVE CAPABILITIES

In terms of curve capabilities, the 400mm Rigid Raised Garden Bed Panel barely curves. With care, you can achieve a 26m radius without distortion using this product.

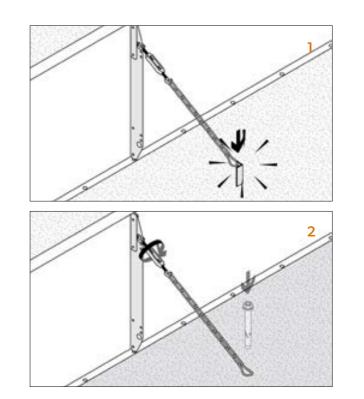
Bracing methods

BRACING ON VARIOUS HARD SURFACES

The Universal Bracing Sets are best suited for these conditions. Simply fit the turnbuckle with cable or chain to the pre-fitted bracing ribs and anchor back to the ground. Alternatively, the 1100mm ground anchor sets can be used on hard surfaces that allow a post hole.

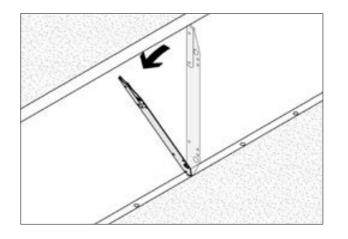
- The stake that comes with the Universal Bracing Set is of a star picket style and will penetrate very hard surfaces, as do the fixing spikes that lock in the feet.
- On concrete, a bolt down method can be used in place of the stake, anchoring the cable or chain with a DynaBolt[™]. Bolt the foot holes in place with an 8mm DynaBolt[™], but first introduce packers to raise it slightly for drainage.

TIP : When using the Universal Bracing Sets, securing the anchor point to alternative structures such as walls or fences is also a workable solution.



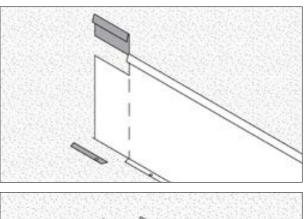
HOW TO MOVE A BRACING RIB

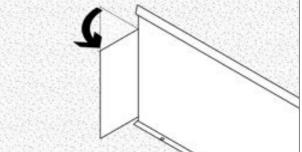
If bracing rib is located above an obstacle preventing staking at that position or where access is difficult it can be moved. Firstly, remove the bracing rib by knocking it laterally near the top with a hammer until loose. It can then be refitted in a new place, inserting the base portion into a bottom foot tab hole first, and then tapping the upper part of the bracing rib with a hammer to return it to a vertical position tight behind the top lip.



CREATING CONNECTION TABS OF YOUR OWN

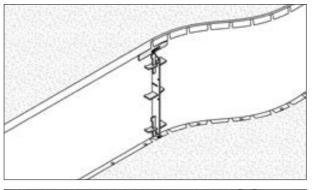
The folded back flange on the end of a panel may be used to fix one end to a wall or other solid feature. Simply bolt or screw as appropriate to fix it strongly. When the edge panel is too long for this method you can use an angle grinder to make a fold back 'join tab' of your own. Remove the top lip portion, then create the fold back by the score and bend method. That tab can then be screwed internally to the surface it meets, which is sometimes another piece of Straightcurve[®]!

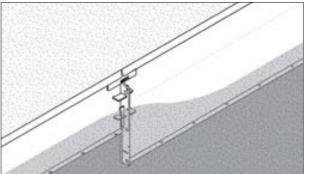




COMPATIBILITY AND WORKING ON SLOPES

- The 400mm Rigid Raised Garden Bed Panel is compatible with the 400mm Flex Raised Garden Bed Panels. This allows them to work in combination. In fact, join slots align across all Rigid or Flex panels (400/400/560mm) so that a continuous top edge occurs if different heights are joined together.
- 2. This across height compatibility can be used to advantage with Raised Garden Beds on a slope. On the lower part of the slope the Raised Garden Bed run may need taller panels with a greater edge face visible due to the slope falling away, with panels of lesser height required further up the bank. It takes some careful planning, but can look very effective, adding volume and height to a bed while reducing the amount of steel used in the project overall.



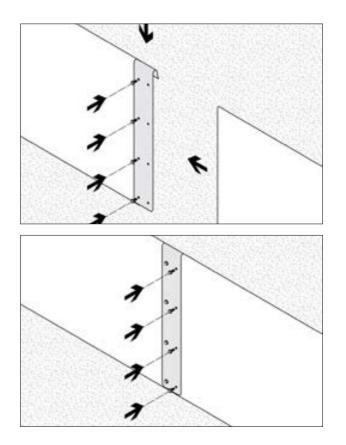


HOW TO USE A CUTBACK PANEL

If a length has been shortened with an angle grinder the join flange is then lost. To allow this piece to still be used the Join Part For Offcuts is simply screwed to the cutaway end (through guide holes in join part). This then overlays the length it is joining, and further screwing sees both panels neatly connected.

This overlay join part does mean screws are visible on the face of the Raised Garden Bed, but it is helpful with perimeters that require a part length to meet or when making regular shaped beds where the side length is predetermined. It also means no offcuts are wasted!

Some tips here are to either place the join part in the least conspicuous spot and use Zinc Screws which blend in as they rust over (for Weathering Steel), or make a feature of it by adding more join parts to create a pattern. With that approach, you may even choose to substitute polished bolt heads in place of the discreet screws.



Straightcurve® Zero-Flex Raised Garden Bed Panel - 400mm

FHL400-400/600/800/1000/1200/2000WS WEATHERING STEEL FHL400-400/600/800/1000/1200/2000GS GALVANISED STEEL

Product features The details that make the difference

Option 1 (D): Universal bracing set with turnbuckle for fast, easier bracing; hooks into bracing rib.

Option 2 (D): Ground anchor set for alternative bracing method; fitting set joins post to panel at top and foot

Full Face Above Ground instead of burying the edge. Discreet Join Seams for a stylish finish.





Angular top profile and foot for Zero Flex performance Round edge square tops for

Moveable Fixing Spikes for easy obstacle avoidance

Precision engineered join sets fc fast, no weld method

100mm

EDGE STYLE

FINISHES

Galvanised Steel
Weathering Steel

For lasting, perfectly straight unmovable lines

Product specifications

TECHNICAL SPECIFICATIONS

Panel Lengths	400/600/800/1000/1200/2000 mm
Top edge thickness	46mm
Steel plate thickness	2mm
Weight per panel	3.5/5.0/6.6/8.2/9.7/15.8kg
BULK BUYING	
Pack quantity	10
Bulk pack weight	35/50/66/80/97/158kg



JOIN SETS ARE REQUIRED

- A Straight join set (panels in a line) *
- B Closed corner set (standard 90°, right angle) *
- C Reverse Corner set (270°, L-shapes) *

*All require Tek screws, select from above to suit configuration

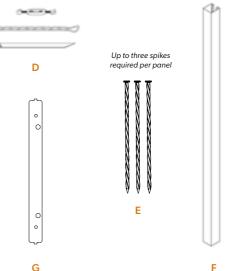
ADDITIONAL ACCESSORIES

REQUIRED

- D Universal bracing set as ground anchor post alternative (turnbuckle/cable or chain/T-stake)
- E Fixing spikes, galvanised, 300mm long
 - 2 for 400/600/800mm panels
 - 3 for 1000/1200/2000mm panels

OPTIONAL

- F Ground anchor set 1100mm, use one for every straight join/one extra for 2000mm panel midpoint
- G Bracing Rib for 2000mm panels only (allows use of universal bracing set)
- H Bracing strap set (used with opposing straight joins no wider than 1200mm apart only)



A



н

С

For Raised Garden Beds that look like really big planter boxes simply create your very own bespoke configurations using multiple Zero-Flex panels.

Cross bracing with the bracing strap set works when opposing straight joins are 1200mm or less apart. This means a free standing bed can be created with this internal bracing approach. The bracing strap set accommodates different widths up to 1200mm, and is simply snapped off for the correct span (repeatedly bend back and forth to snap point) and fitted between the available lock in holes.

For raised garden beds wider than 1200mm the cross bracing strap set is too short, so either a universal bracing set or a ground anchor set -1100mm (includes fitting set) can be used to brace each straight join.

L-shapes and U-shaped beds are also pretty easy once planned out, see how best to approach this below...



Choosing the right panels, join sets & accessories In four easy steps

Step 1: Sketch out your raised garden bed shape including dimensions of all sides.

Step 2: Measure up - On your sketch, mark out all panel sizes required to build your design. Note: Straightcurve[®] planter panels are available in 400mm, 600mm, 800mm, 1000mm, 1200mm and 2000mm long lengths to make up a 'nearest to' option.

Step 3: Jot down the number of panels of each length needed for your design. Do the same for joining accessories (circle each panel join and tally the number of straight joins, closed corners, and reverse corners required)

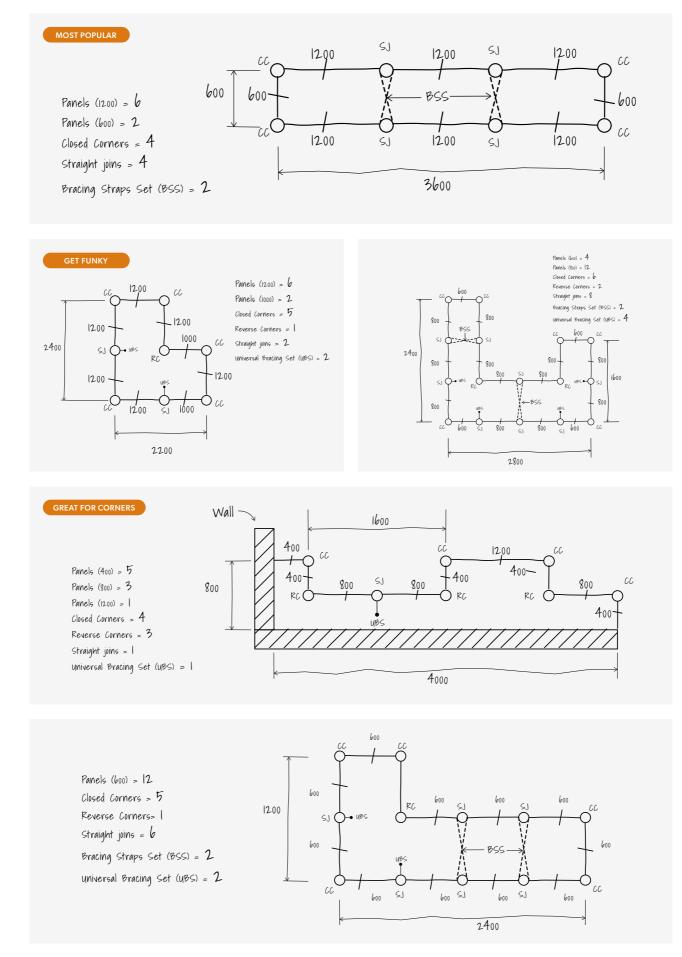
Step 4: Brace it right - each straight join in your design will require bracing. Use one bracing strap set where two opposing joins are equal to or less than 1200mm apart. In all other situations, use one universal bracing set (or ground anchor post 1100mm + fitting set) per straight join. Make a note of how many of each type of bracing you need on your sketch.

Note the join sets bring the panels snug together, but manufacturing tolerances mean what you get may be marginally longer than expected. Be careful with tight spaces!

*see what panel sizes are locally available or if lead times apply for any panel sizes, prior to planning.

We've sketched some examples for you

Raised garden bed ideas...



75mm

400mm Zero-Flex Raised Garden Bed Panel[™] Standard Installation Process

REQUIRED FIXINGS

- Straight join set 10 x Tek Screws (12G x 16mm)
- Closed corner set 6 x Tek Screws (12G x 16mm)
- Reverse corner set 6 x Tek Screws (12G x 16mm)
- Ground anchor set -1100mm 6 x Tek Screws (12G x 16mm)

RECOMMENDED TOOLS

- Ground leveling tools
- Metal hammer
- Cordless drill and Tek screw bit
- Pliers

PREPARATIONS

The Zero-Flex Raised Garden Bed requires NO digging in as it is fixed at the feet to the ground surface. The ground should be level for the edge to sit flush on during installation. Any obstructions should be removed or re-routed. It can be installed on all level ground types including concrete surfaces (where packers are used to sit edge off ground to allow drainage).

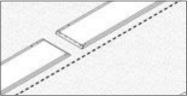
DO...

- O Check the line with a string line before fixing the base.
- ⊘ Use join set parts in the stepped order recommended
- Get the top join pieces to sit just right before screwing tight
- ⊘ Brace near to or at all straight joins
- If installing on a hard surface line the bed to prevent grit spillage
- Set drill speed to high when drilling into ground anchor posts

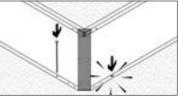
DON'T...

- Set directly onto a hard surface without raising slightly with packers for drainage
- Forget to stake/brace any straight joins or ends
- Accelerate rust with acids or salts (but soapy water is ok!)
- 8 Try and use pop rivets, requires Tek screws for strength
- Solution Forget the safety gloves when working with steel!

MARKING OUT AND SECURING ASSEMBLED GARDEN BEDS



MARKING SHAPE - Mark edge line or use string line on flat ground and layout edge pieces nearby. All panels will now require joining by way of joining option A, B or C.

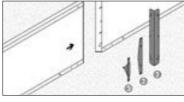


SECURING TO GROUND - Once ALL the panels are joined and in the exact finishing position use fixing spikes to secure base through holes in foot.

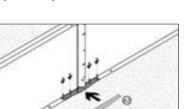
STAKING / BRACING FOR SUPPORT - Will be required and two methods are explained in following pages.

BACKFILL - Evenly to complete the project once staking/bracing is done.

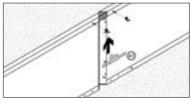
(A) STRAIGHT JOIN



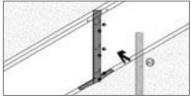
STEP 1 - For a straight join (two panels in a line) use the Straight Join Set (A). Separate the pieces in the set.



STEP 3 - Slide in foot joiner (A2), align guide holes and screw.



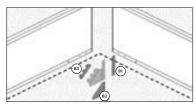
STEP 2 - Stand the first two panels together on a flat surface and insert top connector piece (A1), align guide holes and screw.



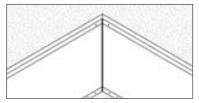
STEP 4 - Fit back rib (A3) flush to align guide holes and screw.



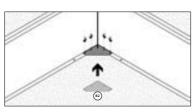
(B) RIGHT ANGLE CORNER (90°)



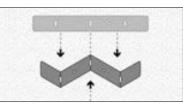
STEP 1 - When creating a standard right angle corner (90°) use the Corner Join Set (B). Break apart the pieces in the set.



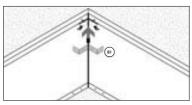
STEP 3 - Stand the two panels at right angles to each other and butt together.



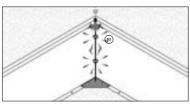
STEP 5 - Slide in foot joiner (B2), align guide holes and screw.



STEP 2 - Take strip piece (B1) and use pliers to shape into staircase pattern.

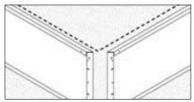


STEP 4 - To join - insert top connector 'staircase' piece (B1), align guide holes and screw.

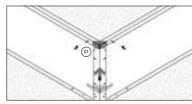


STEP 6 - Firmly grip and hammer arrow shaped wedge pieces (B3) into angled slots at back to fully secure the join.

(C) REVERSE CORNER (L SHAPE BED)

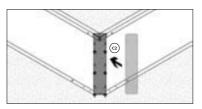


STEP 1 - For a reverse corner stand the two panels in the L shape formation and butt them together.



STEP 2 - From the reverse corner join set (C), insert (slide in) the top piece (C1) as shown and align guide holes and Tek screw in place.

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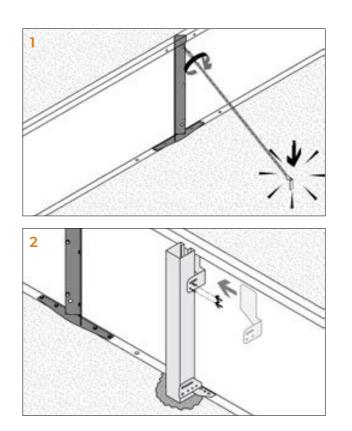


STEP 3 - Position the back fixing plate (C2) align and Tek screw through guide holes to secure.

BRACING THE PANELS

ALL straight joins and garden bed ends will require bracing. Either:

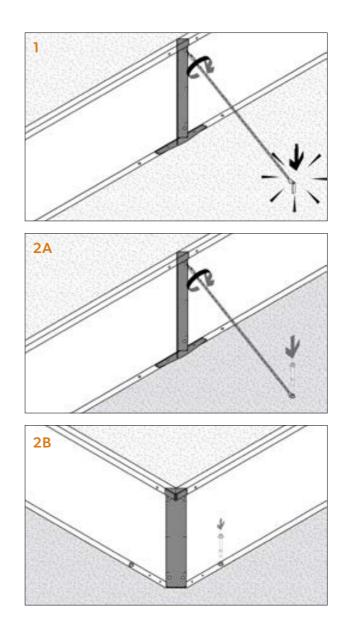
- Use Universal Bracing Set to hook into top hole in join rib and anchor to the ground, adjusting tension with the turnbuckle. For the middle of the 2000mm panels there is no such point of attachment, but bracing is needed. In this case, insert the bracing rib for 2000mm panels in the middle of the panel and attach the universal bracing set to this fitted bracing rib OR
- 2. Use Grounding Anchor Set -1100mm adjacent straight joins and at wall ends (also an alternative method to brace middle of 2000mm length panels). Fitting set is used to attach post to bottom foot and behind top fold of the panel.



In these situations use the Universal Bracing Sets. Fit the turnbuckle with cable or chain to the straight joins through hook-in holes and anchor with the stake supplied.

- The stake that comes with the Universal Bracing Set is of a star picket style and will penetrate very hard surfaces, as do the fixing spikes that lock in the feet.
- On concrete, a boltdown method can be used in place of the stake, anchoring the cable or chain with a DynaBolt[™] (A). Bolt the foot holes in place with an 8mm DynaBolt[™] (B), but first introduce packers to raise it slightly for drainage.
- 3. If you can't penetrate the surface at all you can create a free standing Raised Garden Bed or use our four panel planter boxes that require no lock down. For free standing raised garden beds with straight joins that are no wider than 1200mm, opposing straight joins can be braced with our cross bracing straps running between them. These are simply attached as crossover diagonal straps that run from the top of both straight joins to the bottom of the opposite straight join. Note that the bracing strap only works between two straight joins, so when a straight join is opposite a reverse corner (as in an L-shape design) the universal bracing set is required for that straight join.

TIP: When using the Universal Bracing Sets, securing the anchor point to alternative structures such as walls or fences is also a workable solution. Use more rather than less chain length when the install space allows this.



MAKING DIFFERENT HEIGHT RAISED GARDEN BEDS

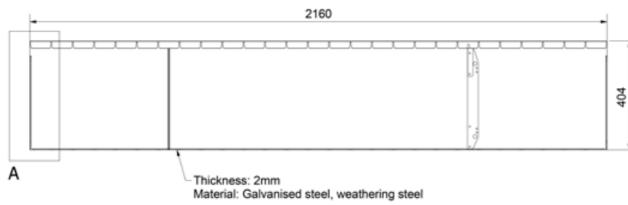
The Zero-Flex raised garden beds look great in combination, with different heights placed together. They are not join compatible between heights, so the way to do this is to build them as separate raised garden beds and then butt them together or position them in proximity. A perfectly level base would be key to achieving this look.

SPECIAL CASE - USING A 2000MM PANEL

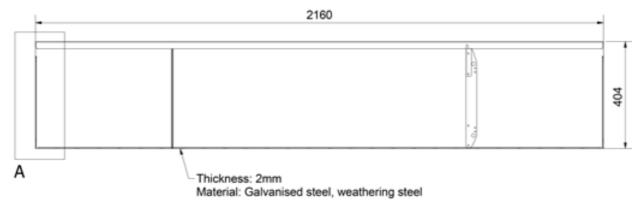
These panels are the longest available and will require a ground anchor set at the midpoint as well as where straight joins occur. If using the Universal Bracing Set at the panel midpoint, the dedicated bracing rib needs to be purchased to allow attachment of the turnbuckle.

Technical Drawings

STRAIGHTCURVE® FLEX RAISED GARDEN BED PANEL - 400MM

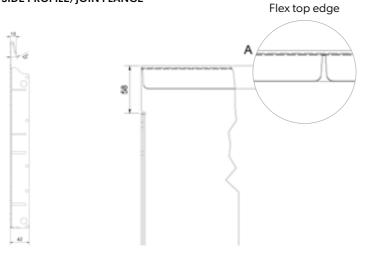


STRAIGHTCURVE® RIGID RAISED GARDEN BED PANEL - 400mm



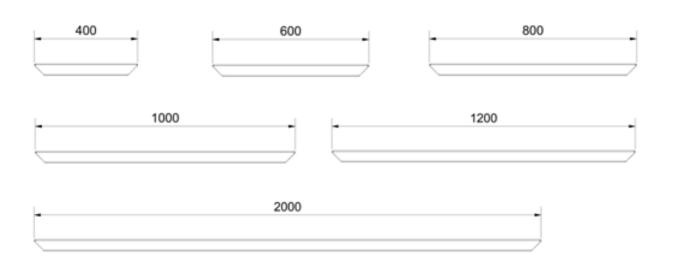
UNIVERSAL SPECIFICATIONS

SIDE PROFILE/JOIN FLANGE

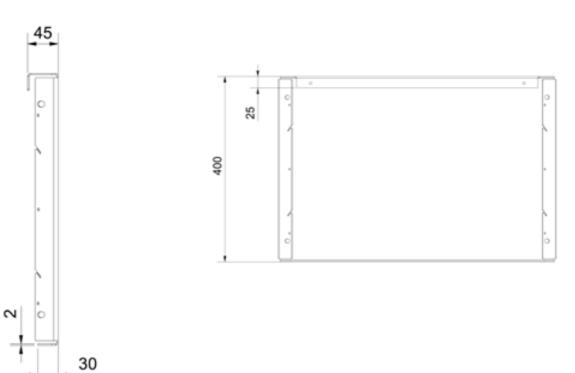




STRAIGHTCURVE® ZERO-FLEX RAISED GARDEN BED PANEL - 400MM



PANEL END/JOIN FLANGE



NOTE: Foot holes not shown in these diagrams are of 9mm diameter