# 240mm 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!

### Use these edges as



RAISED GARDEN BEDS
Raised Garden
Bed borders



PATH STEPS & RETAINING
Step faces for paths
and slopes



**LAWN EDGING**Lawn edge that stands taller

### Perhaps it looks something like these?

OR



Straightcurve® Flex Raised Garden Bed - 240mm



Straightcurve® Zero Flex Raised Garden Bed - 240mm

## How do you choose the 240mm 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		
	Flex - 240	Rigid - 240	Zero-Flex - 240
Something I can do myself	<b>~</b>	<b>~</b>	~
A super high-quality raised garden bed that's stylish and strong	<b>~</b>	~	<b>~</b>
Tree rings	<b>~</b>	×	×
Something rigid that helps me to create a straight run	×	~	<b>~</b>
A straight edge that will stay true and won't waver	×	×	<b>~</b>
An edge ideal for linear designs with plenty of corners	×	×	<b>~</b>
Something with a square shaped top edge making it appear boxy	×	×	<b>~</b>

How about this!? It's also possible to combine styles, as our Flex Raised Glarden Bed panels and Rigid Raised Glarden 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 stable 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.

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, consider setting the foot-stabilising galvanised spikes and stakes or bracing anchors into some concrete for extra hold. The firmness of the subsurface ground when the spikes are hammered in is the best indicator as to whether this is needed; they need to gain purchase and feel rigid. The 240mm Raised Garden Beds typically do not experience a great outward force, so in the majority of cases concrete is not required.

However, if the edge is performing as a step front it's worth using the Universal Bracing Set (instead of the small anchor posts) with the anchoring stake concreted in for a sturdier step retainer.

#### **HOW TO POSITION THE EDGE**

These Raised Garden Beds have a front facing side with discreet join seams, it's designed to show the full face with no need to dig it in (courtesy of the grounding feet). The back side retains the actual garden fill so 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 do so when using steel panels for raised beds, but the lockdown foot feature these edges possess has eliminated the need for this practice of burying the edge by one third. You effectively get the same result as the old ways, with a third less steel!

Sometimes these products are used as a partly buried garden edge, with the additional height allowing the edge to show more face or raise a bed just slightly higher than the surrounding level.

## WHY DO WE SUPPLY AND RECOMMEND TEK SCREWS?

When fixing the edge stakes to the bracing ribs or the edge fixing lip to the small anchor post we 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
- ✓ Up to 3x faster installation
- No welding required
- No Experience/training needed
- Designed for ease of use

## Straightcurve<sup>®</sup> Flex Raised Garden Bed Panel - 240mm

FL240WS WEATHERING STEEL | FL240GS GALVANISED STEEL



#### **EDGE STYLE**



#### **FINISHES**



Galvanised Steel

Weathering Steel

For smoothly curving Raised Garden Beds that look great and hold position once shaped & installed.

## **Product specifications**

#### **TECHNICAL SPECIFICATIONS**

Length (Installed) 2160mm

Top edge thickness 8mm

Steel plate thickness 2mm

Weight per length 10kg

**BULK BUYING** 

Pack quantity 30
Bulk pack weight inc. pallet 320kg



#### **SOLD AS SET INCLUDING**

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







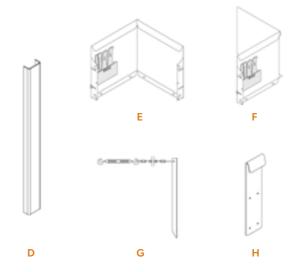
#### **ADDITIONAL ACCESSORIES**

#### **REQUIRED**

D Ground anchor post 470mm, use 2 per length (Tek screws required)

#### **OPTIONAL**

- E Corner piece (90 degree right angle/arm lengths: 255mm)
- F Reverse corner piece(270 degree L-shape/ arm lengths: 255mm)
- G Universal bracing set as ground anchor post alternative (turnbuckle/cable or chain/T-stake)
- H Join Part for Offcuts (Tek screws required)



## Flex Raised Garden Bed Panel - 240mm Installation Guide



#### **REQUIRED FIXINGS**

- Ground anchor post 2 x Tek Screws (12G x 16mm)
- Join part for offcuts 6 x Tek Screws (12G x 16mm)

#### **RECOMMENDED TOOLS**

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

#### **PREPARATIONS**

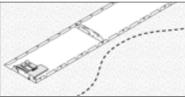
The Flex Raised Garden Bed requires NO digging in as its feet are secured to the ground surface. The base should be smoothed/ leveled for the edge to sit flush on the ground during installation. Any obstructions should be removed or re-routed. It can be installed on all level ground types including concrete 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...

- line before finally fixing in position.
- ② Use the rubber mallet( not metal hammer) when hammering top edge
- Start from corner if using a pre-made one
- Score an intermittent line rather than one deep score line if making corners.
- Ø Follow the instructions carefully and do it
   with a friend If making a two panel ring
- Ø For circular beds backfill evenly for equal
   outward pressure

#### DON'T...

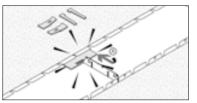
- Use for straight lines, instead use Rigid or Zero-Flex options
- Forcibly bend. Take care and gently flex the edge to shape
- 8 Forget to stake or brace your edge once joined (unless a circle of four lengths or less)
- Accelerate rust with acids or salts (but soapy water is ok!)
- Eave a square top corner unsafely protruding at an end, cap or round it off with a grinder instead.



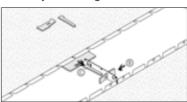
**STEP 1 -** Mark edge line on ground and layout edge pieces nearby.



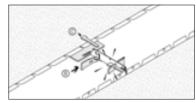
STEP 2 - Place first two edges front face down on the ground with ends touching and with join slots aligned.



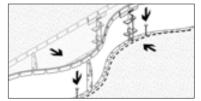
**STEP 3 -** Join using the joining set, break the pieces apart first by hand and insert join bracket (A) securely under the top lip (centered). Press it against back of panels (use a metal hammer to firmly lock in).



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 top slot using the remaining wedge and slider.



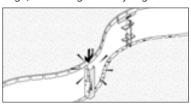
STEP 6 - Set these two edges upright and flex to position where desired, use fixing spikes as temporary placeholders.



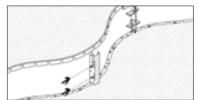
STEP 7 - Introduce and join further lengths (or joined pairs of lengths), butting them against the now standing edge, connecting them as you go.



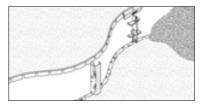
STEP 8 - Check the line, then hammer all fixing spikes (5 per length) through foot tab holes.



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



STEP 10 - Screw the ground anchor post to the bracing ribs with tek screws through guide holes.

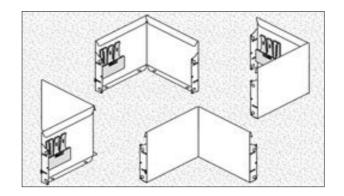


STEP 11 - Back fill your Raised Garden Bed to finish.

## 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 turn backs 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.

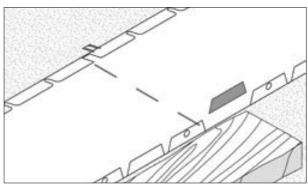


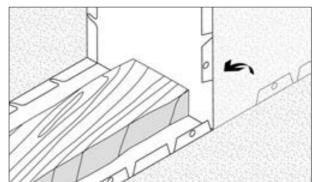
#### **MAKING YOUR OWN CORNERS**

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°) 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.

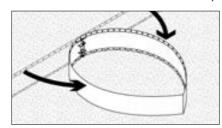
#### **Standard Circle diameters**

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

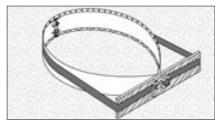
In terms of curve capabilities, the 240mm Flex Raised Garden Bed Panel has a minimum radius achievable of around 700mm. It is designed to allow this degree of flex and no more. This is also why you cannot make a ring with one panel, the two panel ring is the smallest possible. If the Raised Garden Bed 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.

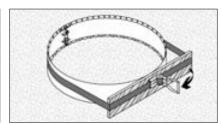
Require 5m ratchet strap and sturdy rectangular board (recommend 600-1200mm wide X edge height). This construction is best done with two people.



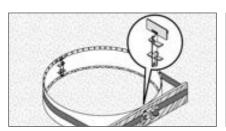
**STEP 1 -** Connect two panels with joining set, then pull ends in to meet in teardrop shape.



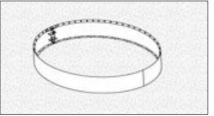
**STEP 2** - Place ratchet strap around midriff and over the board, with the board positioned to pull in open end.



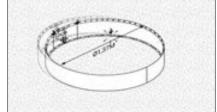
**STEP 3 -** Ratchet in until ends are flush, and fully align join flanges with gradual ratcheting.



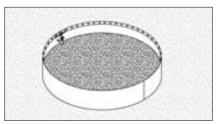
**STEP 4 -** When the edge end join flanges align perfectly, use joining set to lock together.



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



**STEP 6** - Correct to desired ring shape, measuring diameter (1.37m) and pin the feet to hold as you go.



**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

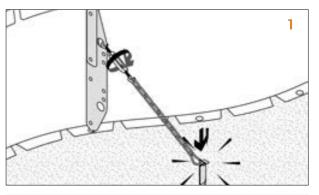
## **Bracing methods**

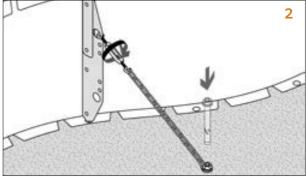
#### **BRACING ON VARIOUS HARD SURFACES**

The 470mm ground anchor posts will not be strong enough to penetrate some surfaces. In these situations use the Universal Bracing Sets by fitting the turnbuckle with cable or chain to the pre-fitted bracing ribs and anchoring back to the ground.

- 1. 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.
- 2. On concrete, a bolt down method can be used in place of the stake, anchoring the chain with a DynaBolt™. Bolt the foot tab holes in place with an 8mm DynaBolt™, but first introduce packers to raise it slightly for drainage.

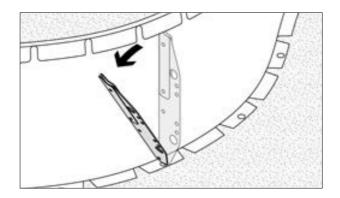
TIP: When using the Universal Bracing Sets, securing the anchor point to alternative structures such as walls or fences is also a workable solution.





#### **HOW TO MOVE A BRACING RIB**

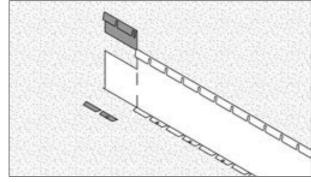
It's easy to move the bracing rib if it is located above an obstacle preventing staking there or where access to the rib will be difficult. Simply loosen and remove the bracing rib by knocking it sideways near the top with a hammer. It can then be refitted in a new place, inserting the base nub into 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.

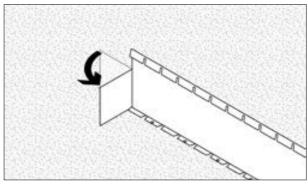


## CREATING CONNECTION TABS OF YOUR OWN

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.

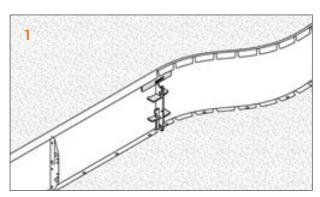
If the edge panel is too long to do that, you can both shorten and create a join tab at the same time with your angle grinder. To do so measure carefully first, then remove the extra top lip portion and create the fold back piece by the score and bend method as shown. The tab can then be screwed internally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

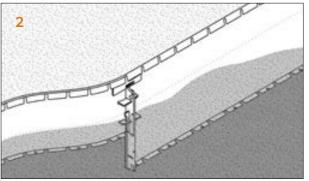




## COMPATIBILITY AND WORKING ON SLOPES

- The 240mm Flex Raised Garden Bed Panel is compatible with the 240mm 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.



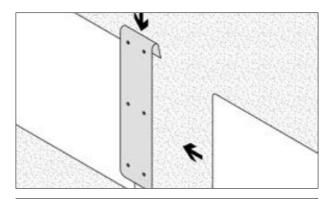


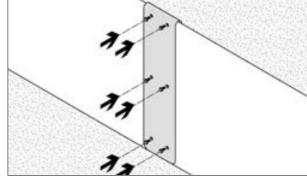
#### **HOW TO USE A CUTBACK PANEL**

When a panel 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 - 240mm

RL240WS WEATHERING STEEL | RL240GS GALVANISED STEEL



#### **EDGE STYLE**

#### **FINISHES**



Galvanised Steel

Weathering Steel

# For Raised Glarden Beds with straight edges

## **Product specifications**

#### **TECHNICAL SPECIFICATIONS**

Length (Installed) 2160mm

Top edge thickness 8mm

Steel plate thickness 2mm

Weight per length 10kg

**BULK BUYING** 

Pack quantity 30
Bulk pack weight inc. pallet 320kg

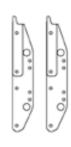


#### **SOLD AS SET INCLUDING**

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







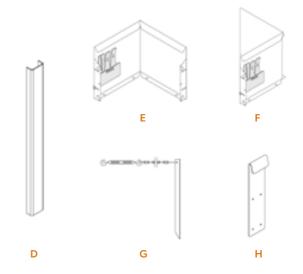
#### **ADDITIONAL ACCESSORIES**

#### **REQUIRED**

D Ground anchor post 470mm, use 2 per length (Tek screws required)

#### **OPTIONAL**

- E Corner piece (90 degree right angle/arm lengths: 255mm)
- F Reverse corner piece(270 degree L-shape/arm lengths: 255mm)
- **G** Universal bracing set as ground anchor post alternative (turnbuckle/cable or chain/T-stake)
- H Join Part for Offcuts (Tek screws required)



# Rigid Raised Garden Bed Panel - 240mm Scan or click to watch install video Installation Guide



#### **REQUIRED FIXINGS**

- Ground anchor post 2 x Tek Screws (12G x 16mm)
- Join part for offcuts 6 x Tek Screws (12G x 16mm)

#### **RECOMMENDED TOOLS**

- Ground leveling tools
- Metal hammer
- Rubber mallet
- Cordless drill and Tek screw bit (for accessories D 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...

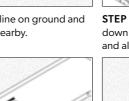
- Check the line with a string line as you add more panels.
- Start from the corner if using a pre made one
- Score an intermittent line rather than one deep score line if making corners.
- Follow the instructions and do it with a friend If making a two panel ring
- Stake strongly when using for steps

#### DON'T...

- Use for curved line designs, instead use Flex Raised Garden Bed
- Forcibly bend if aiming for a mild curve of a radius exceeding 26m
- Forget to stake or brace your edge once joined
- Accelerate rust with acids or salts (but soapy water is ok!)
- Leave a square top corner unsafely protruding at an end, cap or round it off with a grinder instead.



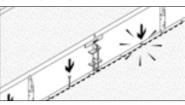
**STEP 1 -** Mark edge line on ground and layout edge pieces nearby.



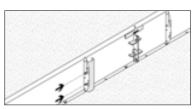
STEP 3 - Join using the joining set, break the pieces apart first by hand and insert join bracket (A) securely under the top lip (centered). Press it against back of panels (use a metal hammer to firmly lock in)



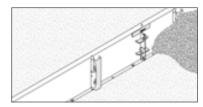
**STEP 5** - Hammer the wedge in firmly. Repeat step 4 for top slot using the remaining wedge and slider.



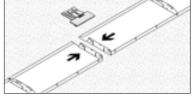
**STEP 7** - Check the line, then hammer all fixing spikes (5 per length) through foot tab holes.



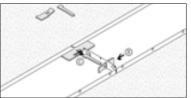
**STEP 9** - Screw the ground anchor post to the bracing ribs with tek screws through guide holes.



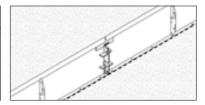
**STEP 11 -** Back fill your Raised Garden Bed to finish.



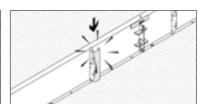
**STEP 2** - Place first two edges front face down on the ground with ends touching and aligned.



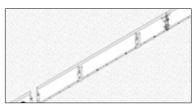
STEP 4 - Next, insert a slider (B) through adjacent bottom slots with it's 'feet' against the edge. Knock it through fully so wedge (C) can insert and lock in the slider.



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



**STEP 8** - To Stake, hammer the ground anchor post in tightly adjacent a bracing rib and close against the bottom foot, finishing below height of rolled lip.

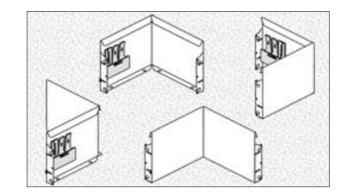


**STEP 10** - Introduce further lengths (or joined pairs of lengths), butting them against the now standing edge and connecting them as you go.

## 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 turn backs 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.

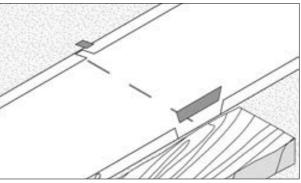


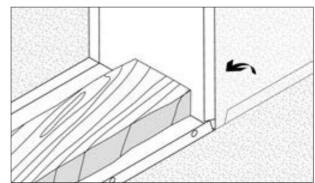
#### **MAKING YOUR OWN CORNERS**

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

- 1. Mark a vertical line down the back of the edge 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°) a fold line will need to be cut in as above. Also neatly cut a groove in the top back lip and foot to aid the bend.





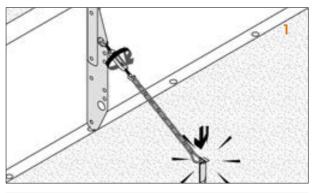
## **Bracing methods**

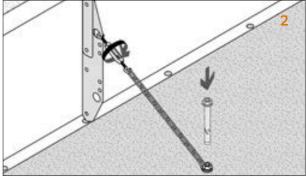
#### **BRACING ON VARIOUS HARD SURFACES**

The 470mm ground anchor posts will not be strong enough to penetrate some surfaces. In these situations use the Universal Bracing Sets by fitting the turnbuckle with cable or chain to the pre-fitted bracing ribs and anchoring back to the ground.

- 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.
- 2. 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.

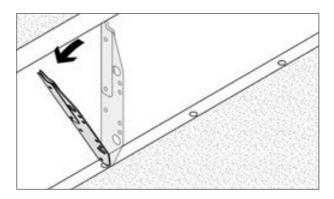
TIP: When using the Universal Bracing Sets, securing the anchor point to alternative structures such as walls or fences is also a workable solution.





#### **HOW TO MOVE A BRACING RIB**

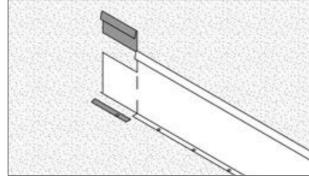
It's easy to move the bracing rib if it is located above an obstacle preventing staking there or where access to the rib will be difficult. Simply loosen and remove the bracing rib by knocking it sideways near the top with a hammer. It can then be refitted in a new place, inserting the base nub into 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.

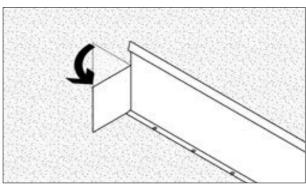


## CREATING CONNECTION TABS OF YOUR OWN

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.

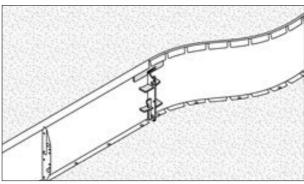
If the edge panel is too long to do that, you can both shorten and create a join tab at the same time with your angle grinder. To do measure carefully first, then remove the extra top lip portion and create the fold back piece by the score and bend method as shown. The tab can then be screwed internally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

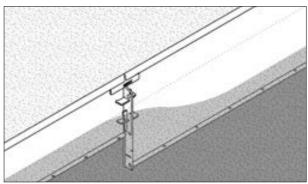




## COMPATIBILITY AND WORKING ON SLOPES

- The 240mm Rigid Raised Garden Bed Panel is compatible with the 240mm Flex Raised Garden Bed Panels. This allows them to work in combination.
- 2. In fact, join slots align across all Rigid or Flex 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.



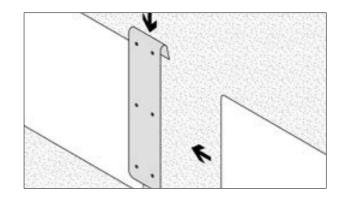


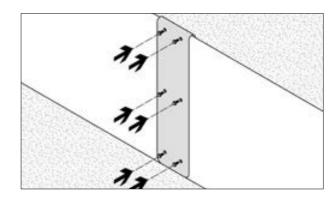
#### **HOW TO USE A CUTBACK PANEL**

When a panel 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® Zero-Flex Raised Garden Bed Panel - 240mm

FHL240WS WEATHERING STEEL | FHL240GS GALVANISED STEEL



#### **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

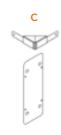


#### JOIN SETS ARE REQUIRED

- 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 the required sets to suit configuration







#### **ADDITIONAL ACCESSORIES**

#### **REQUIRED**

- D Ground anchor set 470mm, use one for every straight join/ one extra for 2000mm panel
- E Fixing spikes, galvanised, 300mm long
  - 2 for 400/600/800mm panels
  - 3 for 1000/1200/2000mm panels

#### **OPTIONAL**

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







D

Ε

F

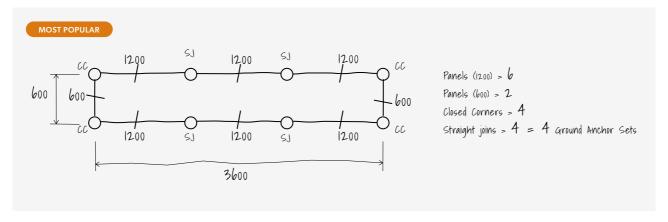
## Choosing the right panels, join sets & accessories

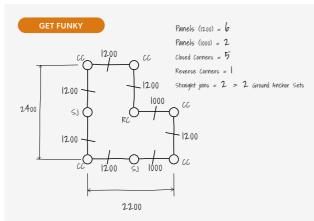
## In three easy steps

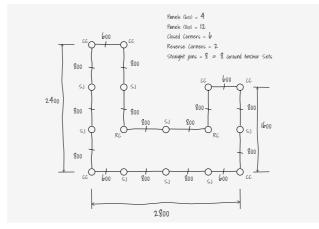
Step 1: Sketch out your raised garden bed shape including dimensions of all sides.

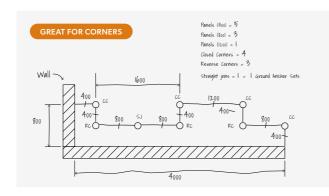
**Step 2:** On your sketch, mark out all panel sizes required to build your design. Note: Straightcurve® planter panels are available in 400mm, 800mm, 1000mm, 1200mm and 2000mm long lengths to make up a 'nearest to' option.

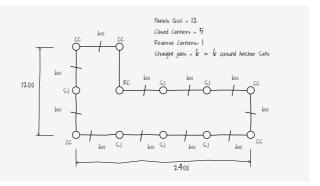
Step 3: Jot down the number of panels of each length needed for your design. Do the same for joining accessories (circle each panel join and tally the number of straight joins, closed corners, and reverse corners required). The number of straight joins also counts for the number of ground anchor sets needed (see bracing advice).











**Note:** the join sets bring the panels snug together, but manufacturing tolerances mean the total length once joined may be marginally longer (talking mm's) than expected, so be careful with tight spaces!

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

## Zero-Flex Raised Garden Bed Panel - 240mm Installation Guide



#### **REQUIRED FIXINGS**

- Closed corner set 6 x Tek Screws (12G x 16mm)
- Straight join set 10 x Tek Screws (12G x 16mm)
- Reverse corner set 6 x Tek Screws (12G x 16mm)
- Ground anchor set 2 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).

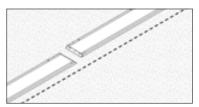
#### DO...

- 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
- Use the Universal Bracing Set for bracing retaining steps
- Ø Brace near to or at all straight joins
- If installing on a hard surface line the bed to prevent grit spill
- Set drill speed to high when drilling into ground anchor posts

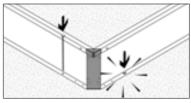
#### DON'T...

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

## MARKING OUT AND SECURING ASSEMBLED GARDEN BEDS





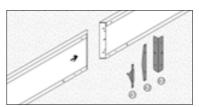


**SECURING TO GROUND** - Once ALL the panels are joined and in the exact finishing position use fixing spikes to secure base through holes in foot.

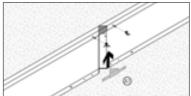
**STAKING / BRACING FOR SUPPORT -** Will be required and two methods are explained in following pages.

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

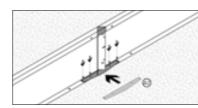
#### (A) STRAIGHT JOIN



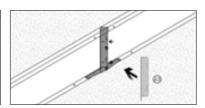
**STEP 1** - For a straight join (two panels in a line) use the Straight Join Set (A). Separate the pieces in the set.



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



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

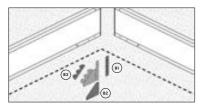


**STEP 4 -** Fit back rib (A3) flush to align guide holes and screw.

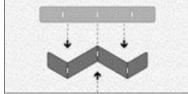


**STEP 5** - Connect further panels to extend line of Raised Garden Bed panels.

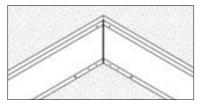
#### (B) RIGHT ANGLE CORNER (90°)



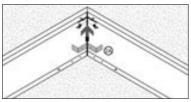
**STEP 1** - When creating a standard right angle corner (90\*) use the Corner Join Set (B). Break apart the pieces in the set.



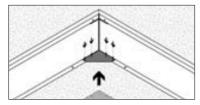
**STEP 2** - Take strip piece (B1) and use pliers to shape into staircase pattern.



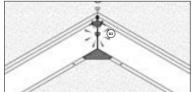
**STEP 3 -** Stand the two panels at right angles to each other and butt together.



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

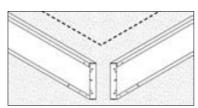


**STEP 5 -** Slide in foot joiner (B2), align guide holes and screw.

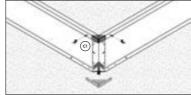


**STEP 6** - Firmly grip and hammer arrow shaped wedge piece (B3) into angled slot at back to fully secure the join .

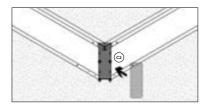
#### (C) REVERSE CORNER (L SHAPE BED)



**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.

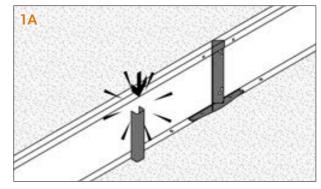


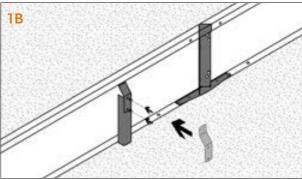
**STEP 3** - Position the back fixing plate (C2) to align with the guide holes and Tek screw to secure

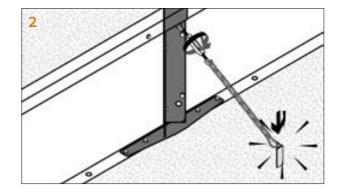
#### **BRACING THE PANELS**

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

- Use Grounding Anchor Set (A) 470mm adjacent straight joins and at wall ends (also required in middle of 2000mm length panels). Fitting lip (B) is set behind the top lip of panel and then screwed to ground anchor post; OR
- 2. 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 point of attachment, but bracing at that point is required. The turnbuckle can be secured there by drilling out an hook in hole in the back of the fold over lip.





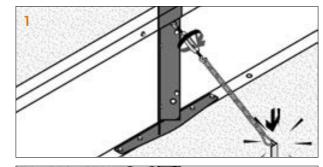


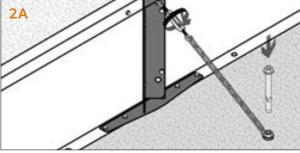
#### HARD SURFACE BRACING METHOD

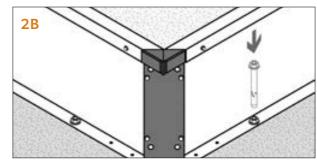
The 470mm ground anchor posts cannot penetrate some hard and rocky ground. In these situations use the Universal Bracing Sets by fitting the turnbuckle with cable or chain to the straight joins through hook in holes and anchor back to the ground.

- 1. 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<sup>TM</sup> (A). Bolt the foot holes in place with an 8mm DynaBolt<sup>TM</sup> (B), 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.







#### 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.

#### **CREATING STEP FACES WITH ZERO-FLEX**

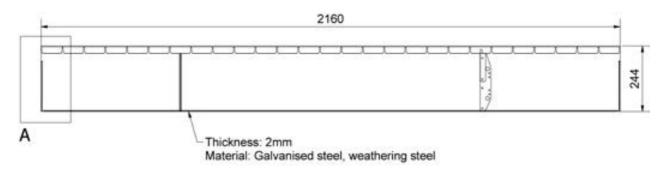
Making steps is easy with the 240mm Zero-Flex where the width of the step can be selected as a complete panel. This works when the ends are hidden and discreetly secured. One way to complete the step is by building a complete rectangle box and filling and stacking them as they are installed up the slope. Alternatively, create a front step face and return at the sides using a closed corner set and additional panel. Either way, be sure to use extra ground anchor sets behind the panel and concrete around them to ensure sufficient retaining strength.

#### **SPECIAL CASE - USING A 2000MM PANEL**

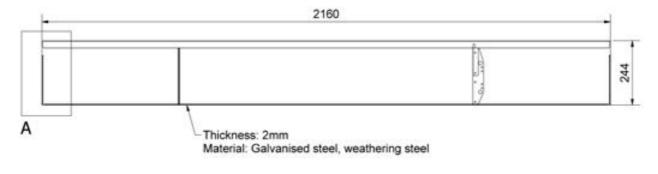
These panels are the longest available and will require a ground anchor set at the midpoint as well as where straight joins occur. If using the Universal Bracing Set a hole would need to be drilled into the back panel lip midway along the panel to allow attachment of the turnbuckle.

## **Technical Drawings**

#### STRAIGHTCURVE® FLEX RAISED GARDEN BED PANEL - 240MM

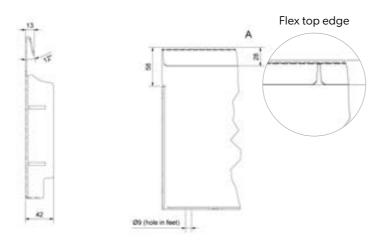


#### STRAIGHTCURVE® RIGID RAISED GARDEN BED PANEL - 240MM



#### **UNIVERSAL SPECIFICATIONS**

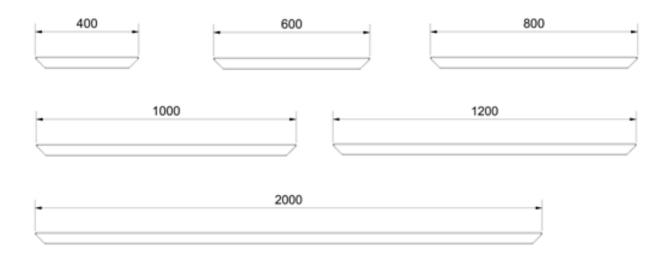
#### SIDE PROFILE/JOIN FLANGE







#### STRAIGHTCURVE® ZERO-FLEX RAISED GARDEN BED PANEL - 240MM NEW PRODUCT



#### PANEL END/JOIN FLANGE

