Metalcraft Fencing

NZ MADE AND TESTED TO PERFORM TO NZ SEVERE WIND CONDITIONS.

PROUDLY USING COLORSTEEL.

Eco® Choice Aotearoa

LICENSE NUMBER: 5717145

METAL FENCING

INSTALLATION GUIDE

INSTALLATION OF YOUR METALCRAFT FENCE

BEFORE YOU BEGIN

Check for underground services before you dig!

Ensure you have the right components and tools.

COMPONENTS REQUIRED

Make sure you have all the required amount of the following and that they have arrived as per your order.

- Posts
- Post caps
- Rails
- Infill sheets
- SHS posts (if required)
- Tek screws for fixing
- Rivets

The following items you can source yourself.

- Concrete

EQUIPMENT REQUIRED

Before you start installing your fence ensure you have the correct safety gear and the following tools.

- Line Marking Paint
- String Line
- Hack saw / grinder
- Spirit Level
- Plum Line
- Measuring Tape
- Tin snips / nibbler
- Vice grips
- Bungee cord
- Post hole digger/ Shovel
- Glue
- Drill and hex-head adaptor
- Safety boots
- Gloves
- Other safety gear might also be required.

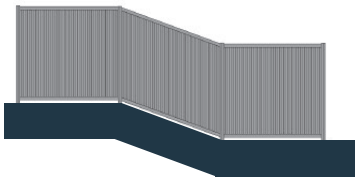
HANDLING INSTRUCTIONS

- Safety gloves should be worn at all times when handling fencing components.
- The edges of the metal are sharp and will cut skin when handled incorrectly.
- Unpacking should be done by two people to avoid damage.
- When unpacking crates please lift fencing components straight up and out of the crate so as to not scratch the materials underneath.
- If stacking components on the ground it is recommended that you place a cover sheet on bearers or the like to avoid contact with the ground.

INSTALLATION OF YOUR METALCRAFT FENCE

RAKED FENCE

- Measure the ground distance between the holes and cut the longer lengths of rail to suit.
- Assemble the post as per the previous panel and place into position.
- Fix the new post to the existing post and concrete the hole. To install the sheets, both the top and bottom of each sheet will need to be cut to match the angle of the slope. Allow a total of 10mm clearance to ensure the Sheets fit correctly in the rails.
- Install the sheets as per standard installation.
- With the sheets in place fix the top rail using the same method as with a standard Fence. When using a slat top design, the slats will also need to be cut to fit.



STEPPED FENCE

A stepped fence should be installed using the same procedure as with a standard fence panel except the post of the higher panel will need to be longer. This will ensure correct post embedment in the footing

- All rails and sheets in a stepped fence remain the same size as for a standard panel. This design requires the use of single fence caps.

TAPERED FENCE

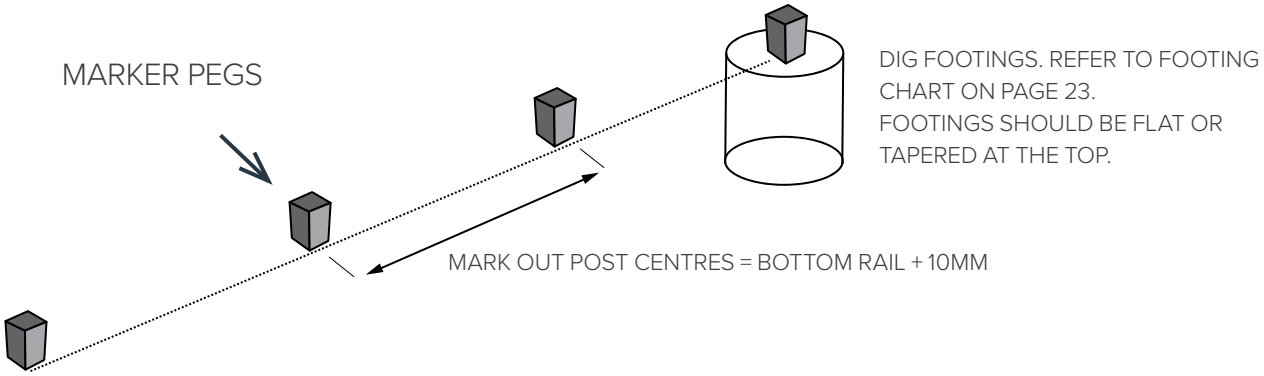
- Tapering may be required at the free end of a fence and occurs over the last two panels. Depending on your fence configuration a longer top rail will be required.
- The end and middle posts should be cut to the required height.
- Position the posts on the ground and install the bottom tracks. Make sure the posts are perpendicular to the bottom rail, mark and cut the top rail to fit.
- Concrete the posts into place.
- The top of each sheet will need to be cut before installing in line with the taper angle.
- Allow a total of 10mm clearance to ensure the sheets fit correctly in the top rail.
- Install the cut sheets as with a standard panel installation.

INSTALLATION OF YOUR METALCRAFT FENCE

MARK OUT THE POST HOLES

Run a string line the length of the fence and dig the first hole.

if you want to include a mowing strip on top of the footing then you need to make height allowances for the size of mowing strip to be included within your footing design.



ASSEMBLE POSTS

Assemble posts by screwing them back to back with 7 staggered screws.

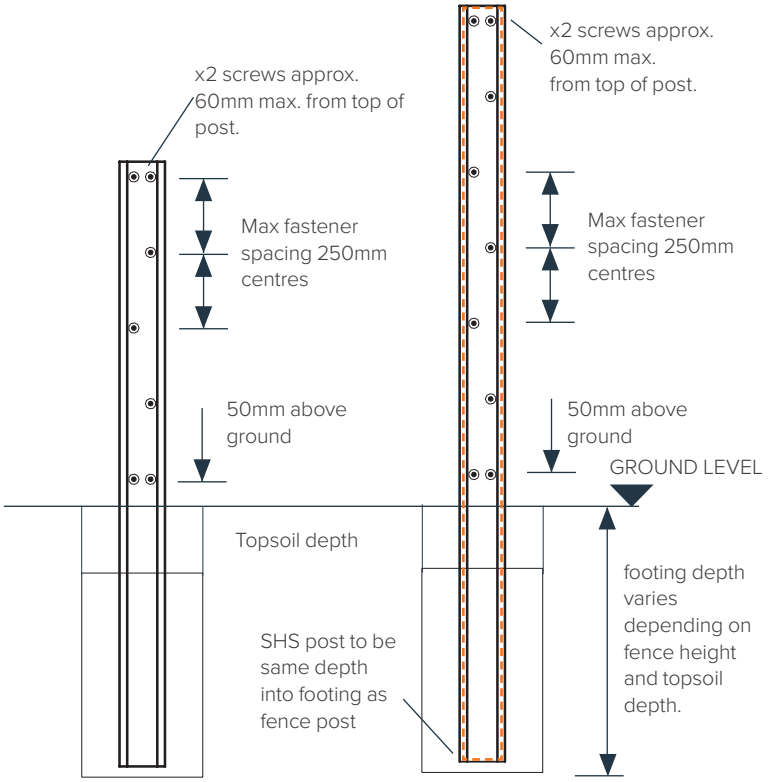
HINT: POSITION THE TOP SCREW BELOW YOUR TOP RAIL TO AVOID CATCHING WHEN POSITIONING THE TOP RAIL IN PLACE.

0.95MM POST BACK TO BACK

Fix posts back to back with 10-16x16mm fasteners at max 250mm centres and double at top and bottom.

0.95MM POST BACK TO BACK +SHS 65x65x2.5mm

Fix posts to SHS with 10-16xmm fasteners at max 250mm centres and double at top and bottom.



INSTALL POSTS

PREPARE THE FIRST POST

1. Fix posts as per post configuration requirements.
2. Install posts based on your wind region requirements and correct post configuration and footing design.
3. Take a single post measure down the height of your fence - 50mm ground clearance -this is the bottom rail.
4. Place post in footing and adjust to correct height ensuring the footing is 100mm deeper than the end of the post.
5. Concrete the post in making sure the bottom rail mark is 50mm above the ground.
6. Pack the concrete hard against the post and use a level to ensure the post is vertical.
7. Ensure the top of the concrete tapers away from the post to allow for drainage. Water should not be allowed to pond over post footings.
8. Clean off any concrete splashes and allow to set.

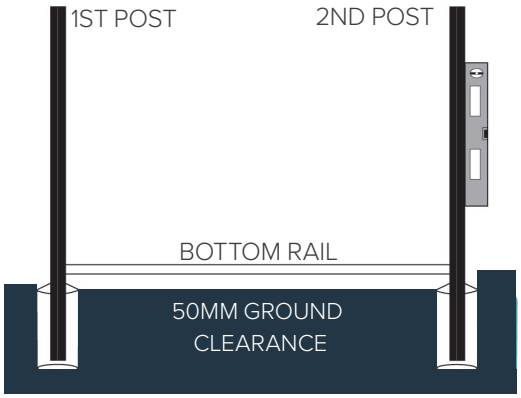
POST FOOTINGS

1. Premixed concrete may be used. Mix as per manufacturers instructions.

INSTALLATION OF YOUR METALCRAFT FENCE

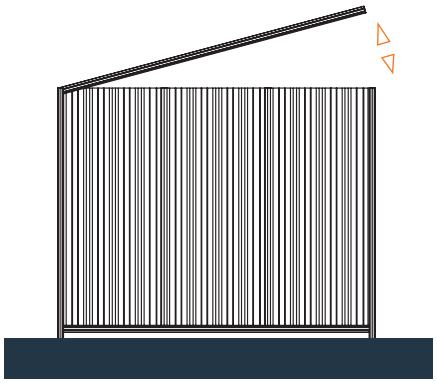
INSTALL REMAINING POSTS

1. While the first post is setting lay a string line, mark out and dig the remaining holes at correct centres for correct sheet configurations.
2. Use the bottom rail as a guide. Remember raked fences may require longer rails.
3. Position gate posts if required.
4. Place the second post into the hole and insert a bottom rail between the posts using the marks to position. Ensure the rail is inserted fully into the posts and that there is a gap of 50mm between the bottom rail and the ground. Placing a packer under the rail can assist while the rail is then screwed into position.
5. Place the top rail into the posts and fix with self-drilling screws on both sides of the post. Do not fully tighten as these screws must be removed to insert the sheets. Use a level to position posts in line and at the correct height.
6. Concrete in the second post.
7. Continue to install the framework until completed. Do not install the infill sheets at this time.



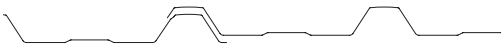
INSTALL INFILL SHEETS

1. Allow the concrete to set for a minimum of 24 hours.
2. Remove the screws on one side of the top rail and hinge it up to slid the infill sheets into the bottom rail. Lower the top rail over the sheets to help hold the sheets together.



3. Allow for an overlap when inserting the second sheets. Refer to the below diagram:

AZTEC OVERLAP



KAHU® OVERLAP

4. Once all sheets are in place step back and assess the panel. Make adjustments where required to ensure rails are aligned and the overall panel looks good.
5. Screw the top rail in place once satisfied. For High wind zones and above additional fixing of each infill sheet to rails is required as follows.

   FIX ALL INFILL SHEETS AT MIDSPAN USING 3MM RIVETS

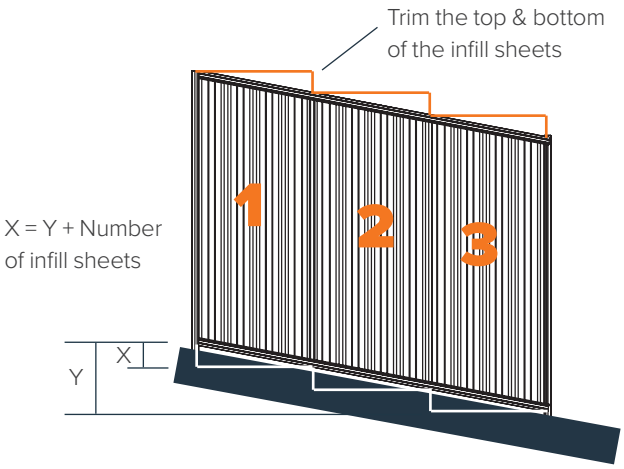
   Aztec : 10x25mm self drilling screws everycrest.

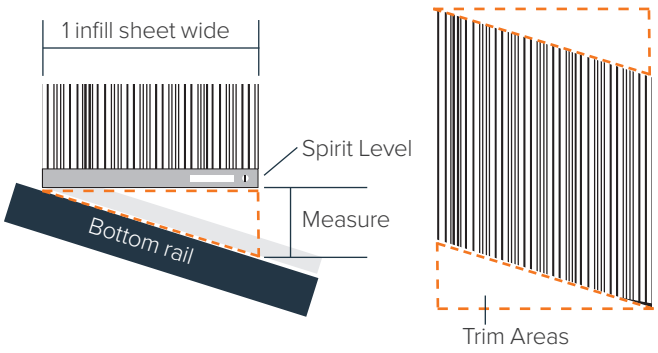
   Kāhu® 10x25mm self drilling screws every 2nd crest.
6. Fix post caps using hex head screws or glue.
7. Rinse the fence clean of swarf.

INSTALLATION OF YOUR METALCRAFT FENCE

HOW TO DETERMINE THE CUT INFILL

1. Place a spirit level inside the rail at the high end.
2. Measure across the width of the sheet. From this point measure the height from the bottom of the level to the inside of the rail. This determines the angle of the cut.
3. Where possible match the angle of the top of the rail to that of the bottom rail. The top rail angle can be adjusted if desired, but note that the post height will increase. Mark allowances for this when fixing posts in the ground.
4. Measure the height of the cut required from the base of the infill sheet. Do the same at the top of the sheet to ensure angles match. Ensure you measure from edge to edge of the infill sheet. Placing all infill sheets together and cutting once will ensure uniformity.





UNEVEN SITES AND VERTICAL SLITTING

If a slope is greater than 1:8 this may reduce the sheet coverage to a point where one of the sheets may require vertical slitting.

This can be achieved using a straight edge and scoring with a tungsten tipped hang cutters, then bending and snapping the sheet.

COMPLETING THE FENCE

Before screwing any rails into position step back and assess the fence. Check infill sheets run parallel to the posts; ensure overlaps are tidy and flush, and rails are aligned. Make adjustments as required and then screw the rails into position.
Fix post caps to your fence using hex head screws or silicone sealant.

GATES IF REQUIRED

GATES (IF REQUIRED)

1. Fix the two hinges to the gate using screws.
2. Position and fix the gate and gate post making sure the Post is flush with the top of the Gate.
3. Chock up the swinging side of the gate while using a plum line so that the posts are square.
4. Install the catcher at a good working height.

CONTACT

Metalcraft fencing is available nationwide from our Authorised Installers, Distributors and all Metalcraft Fencing branches.

Please contact for more information and if you require assistance with fencing orders and any enquiries you might have. The following branches manufacture and distribute metal fencing.

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03 349 7350
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Metalcraft Fencing

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