

**COLORBOND® STEEL
FENCING**

Colorbond®

installation

A STEP-BY-STEP GUIDE TO INSTALLING YOUR FENCE

Before you start, read this

Are you a homeowner looking to install your own COLORBOND® steel fence or an installer looking to find information to help you install a COLORBOND® steel fence? This COLORBOND® steel Fencing Installation guide has been designed to provide you with the basic steps in installing your fence. As every site is different, we also recommend speaking with your COLORBOND® steel supplier or calling BlueScope Steel Direct on 1800 022 999 for installation information specific to your site.

- ✓ This installation guide does not cover fences taller than 1.8 metres. Please seek advice from your supplier.
- ✓ Describe your site details when ordering materials (see 'Site details' section below).
- ✓ Identify the soil type for your fence site. Refer to the Table in Step 1. This will determine the concrete required for the job.
- ✓ Make sure you know the whereabouts of underground electricity, gas or water mains before you begin digging. Ring 1100 'Dial before you dig'.
- ✓ Check your local council regulations on boundary fencing.
- ✓ Ensure you read through this guide completely before you begin to ensure you fully understand the installation process.
- ✓ Check the delivered material for the correct number of components and general condition.
- ✓ Not all coloured steel fencing is made from COLORBOND® steel so make sure you get what you pay for. Check our 2 simple steps on the back page to identify genuine COLORBOND® steel.

IMPORTANT!

It is recommended that the reader pays particular attention to those items identified as **IMPORTANT** in this brochure to ensure satisfactory long-term performance.

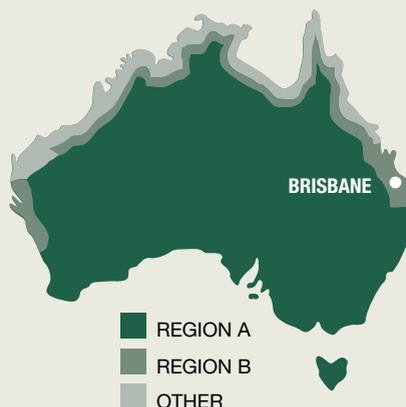
SITE DETAILS

Fencing made from COLORBOND® steel is the result of decades of performance-monitoring under some of Australia's harshest conditions. This happens at exposure testing sites across Australia. So you can be sure fencing made from COLORBOND® steel is designed and made for durability in Australian conditions. However, there are important site details to consider in the design of your fence. These include:

- potential wind effects on your fence (governed by the wind region you live in and surrounding developments and vegetation)
- soil type
- the slope of the site.

PROVIDE THESE DETAILS TO YOUR COLORBOND® STEEL FENCE DISTRIBUTOR TO HELP THEM TAILOR A DESIGN THAT'S BEST FOR YOU.

If in proximity to severe marine conditions or bounding swimming pools, please seek specific advice from BlueScope Steel Direct on 1800 022 999.



WIND REGION A = Normal

WIND REGION B = Intermediate

WIND REGION OTHER = Cyclonic

EQUIPMENT REQUIREMENTS



TOOLS*

- Self-Drilling Screw Gun with Clutch System
- Spirit Level or Magnetic Level
- Rubber Mallet
- String Line and Marker Pegs
- Scissor Shovel and/or Spade
- Wheelbarrow and Larry Hoe
- Spud Bar
- Earth Leakage Circuit Breaker.

PERSONAL PROTECTIVE EQUIPMENT*

- Safety Glasses
- Protective Gloves
- Hat & Sun Lotion
- Safety Footwear
- Ear Muffs (if cutting required)
- Overalls (if cutting required).

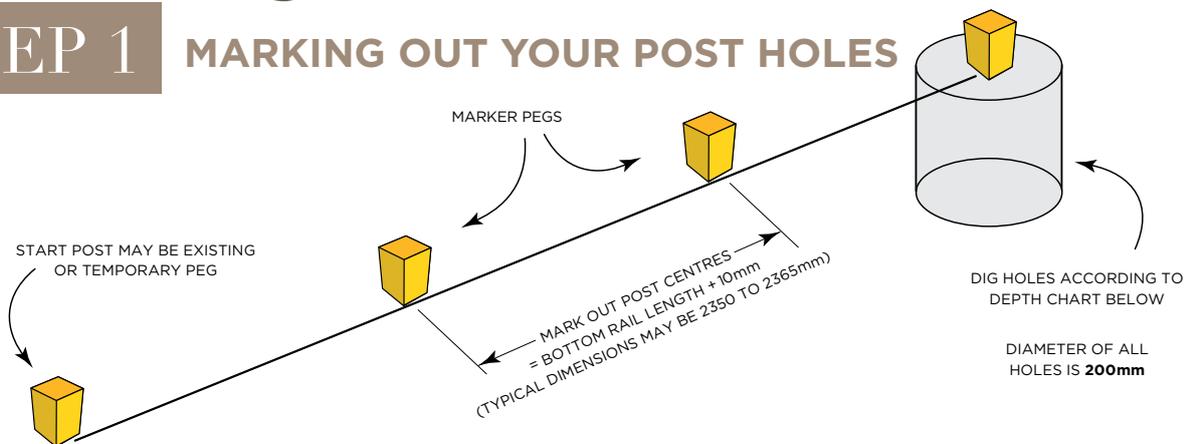
OPTIONAL EQUIPMENT*

- Nibbler (if cutting required)
- Tin Snips (if cutting required)
- Concrete Mixer
- Post Hole Digger.

* Most pieces of equipment are available for hire at tool hire centres.

A step-by-step guide to installation

STEP 1 MARKING OUT YOUR POST HOLES



IMPORTANT!

Post lengths required will increase accordingly to cater for these ground conditions.

SOIL TYPE	MINIMUM HOLE DEPTH	APPROXIMATE CONCRETE REQUIRED <small>Recommended 20MPa Standard Concrete Mix</small>
Rock	400mm	1 bag per hole (20kg bag)
Clay/Firm Earth	600mm	2 bags per hole (20kg bags)
Sand/Loose Fill	900mm	3 bags per hole (20kg bags)

IMPORTANT!

Post hole sizes are suitable for Wind Regions A and B and all Terrain Categories except Cat 1 (very exposed open terrain).
Seek manufacturer's guidance for other wind regions or Cat 1 Terrain.

SLOPING OR UNEVEN SITES

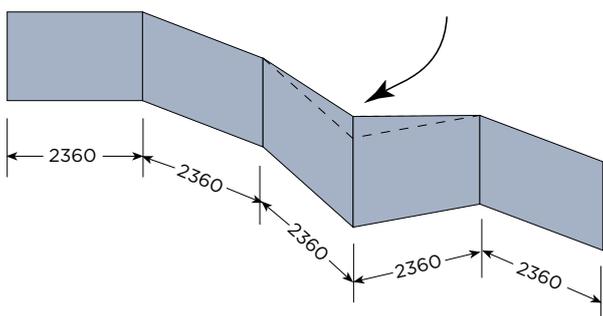
Additional information

It's highly recommended that you invest a small amount of extra effort to rake your fence on sloping or uneven ground rather than stepping the panels. It achieves a better overall appearance as well as providing a stronger fence.

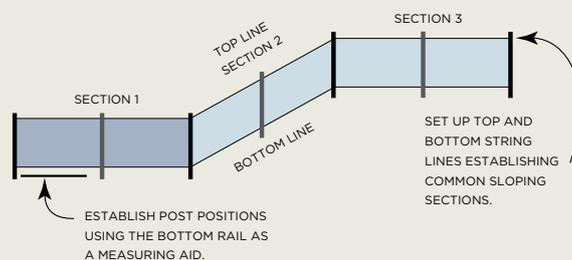
Uneven sites

Vertical slitting of sheets may be required if slope is greater than 1 in 8. This may reduce the three sheet coverage to a point where one of the sheets may require vertical slitting. On COLORBOND® steel and ZINCALUME® steel this can be achieved using a straight edge and scoring with a tungsten tipped hand cutter available at most hardware stores, then bending and snapping the sheet.

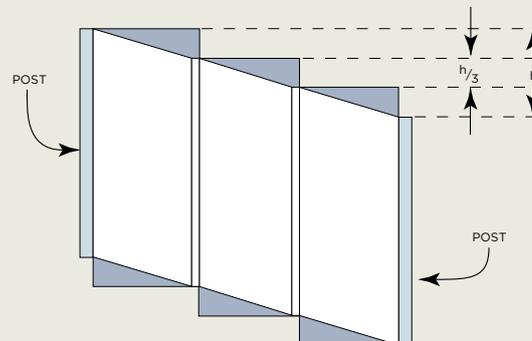
The top rail angles can be adjusted to create a smoother angle if desired. Note that the post height required will increase, so allow for this when fixing the posts in the ground.



A. MARKING OUT SLOPING SITES



B. CUTTING OF SHEETS FOR A RAKED FENCE

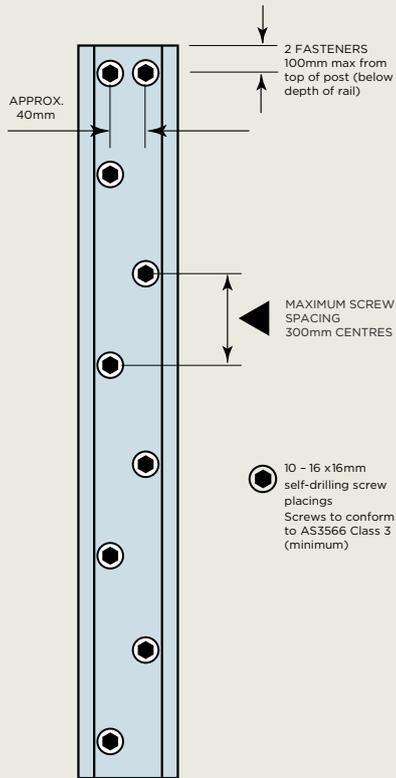


The preferred method of cutting sheets is to use a nibbler or tin snips.

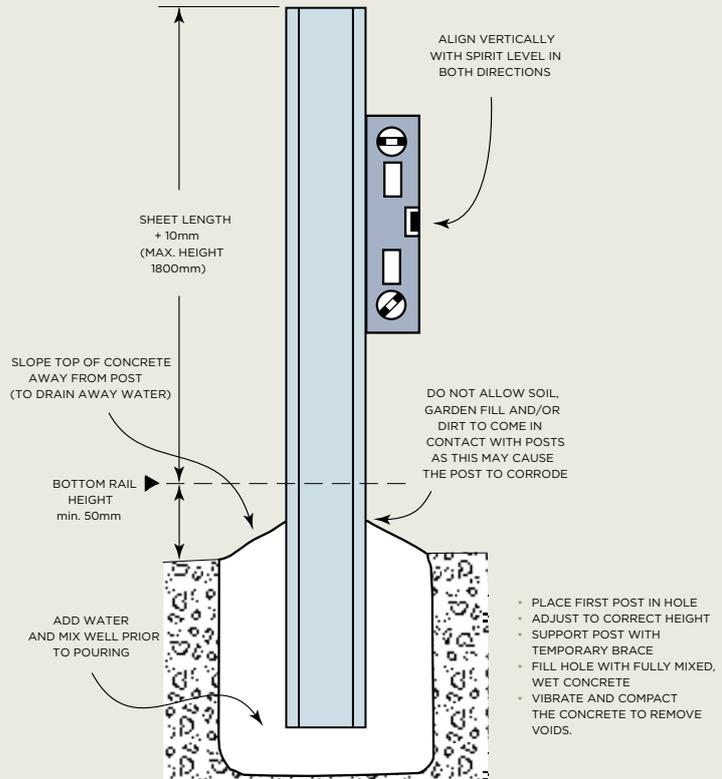


STEP 2 SECURING POSTS

A. FASTENING POSTS TOGETHER



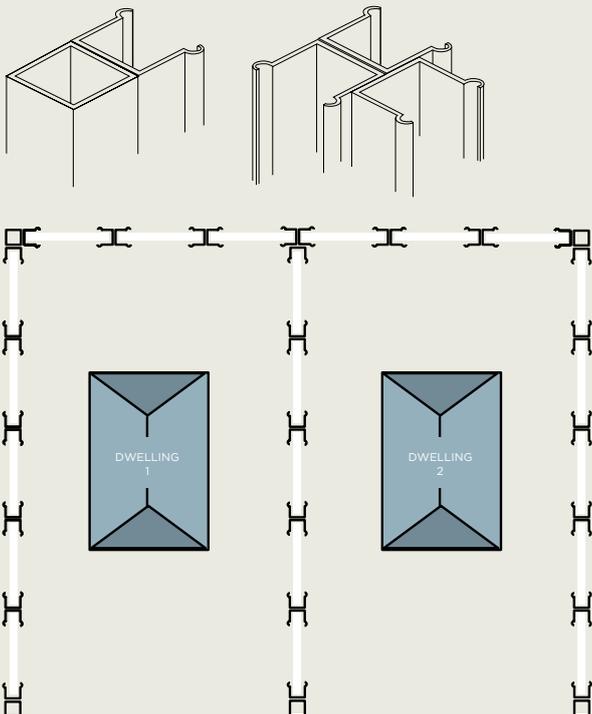
B. FIXING POST IN GROUND



END POSTS, CORNER POSTS AND JUNCTIONS

- = Square Hollow Section (SHS)
- ⊓ = Fence Post

Dimensions of the SHS and fence posts will vary according to the fence supplier. Contact your distributor for details.

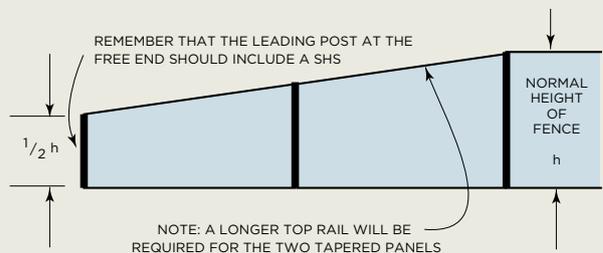


TAPERING THE FRONT OF YOUR FENCE

It is highly recommended that you taper the last two panels of your fence at an unsupported end, particularly where your fence extends beyond the front of your house.

Cut sheets as per the instructions in the 'sloping or uneven sites' section.

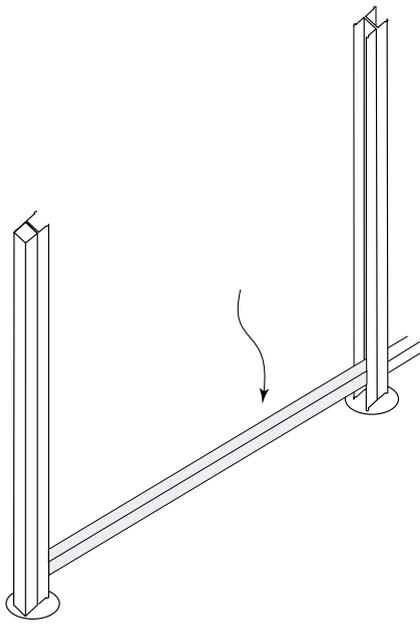
The minimal extra effort in tapering the unsupported end will provide a better looking fence than a stepped fence and is much stronger than leaving it at full height.



EXAMPLE FOR 2365mm POST CENTRES

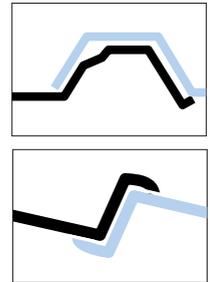
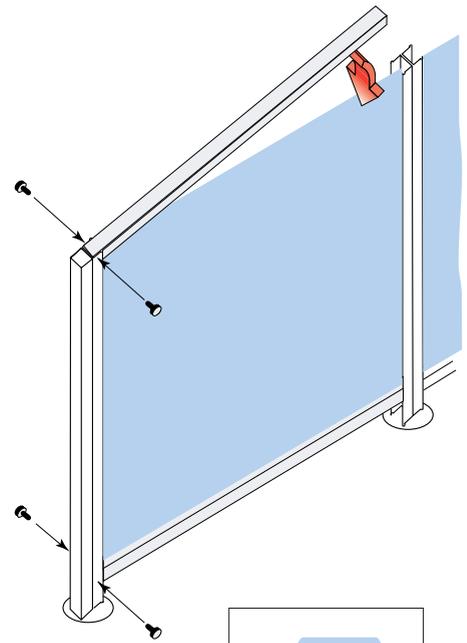
FENCE HEIGHT	TAPERED END HEIGHT	TOP RAIL LENGTH IF TAPERED PER TWO PANELS
1500mm	750mm	2385mm
1800mm	900mm	2400mm

STEP 3 INSTALLING INFILL SHEETS



- Insert bottom rail between posts to determine exact location of next post.
- Adjust bottom rail to correct height - it is important to maintain a minimum gap of 50mm between bottom of rail and ground.
- Screw fix the rails at this stage.

- Place top rail into post and fix with self drilling screws on both sides of posts. Ensure that the self-drilling screws are not fully tightened, as they need to be removed when inserting sheets. Ensure the position of the top rail is protruding 2mm above the top of the posts to reduce the risk of injury.
- Continue this procedure until fence length is achieved.
- Allow the concrete to cure overnight. Note: Longer curing period may be required in very cold and/or wet weather.
- Unscrew top rail and remove.
- Fit infill sheets into bottom rail ensuring correct lap as per diagrams (right).
- Place top rail on infill sheets working from one end to the other, locating the profile in the rail. A gentle tap with a rubber mallet may help.
- Secure the top rail with self-drilling screws on both sides.
- Hose down when finished to remove any swarf such as drill filings or remnants from the nibbling process.
- Check installation.



EXAMPLE OF CORRECT LAP DETAIL FOR INFILL SHEET PROFILES

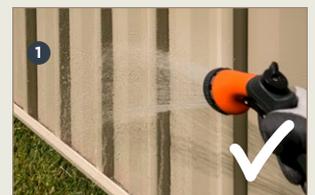


MAINTENANCE AND WARRANTY OF YOUR FENCE

- 1 To keep your fence looking its best, simply wash down periodically with water when cleaning the car or watering the garden. A soft broom should be sufficient to remove any cobwebs. Pay particular attention to the area under the top rail, which is sheltered from natural washing by rain.
- 2 **DO NOT** build up soil, garden fill and/or dirt against the bottom rails and posts of your fence as this will retain water and lead to corrosion.
DO NOT use your fence as a retaining wall, as it is not designed for this purpose.
- 3 Avoid spraying the fence with garden sprays or fertilisers as these can damage the surface. If this occurs wash the fence down with water.
- 4 Adequate drainage is needed to ensure that water does not pond in the

bottom rail and to assist in the removal of debris. This is often achieved by pre-punched holes in the bottom rail, or by designing the posts such that there is a clearance between the ends of the bottom rail and the posts.

- 5 **DO NOT** use touch up paint. Minor scratches should be left alone or the infill sheet replaced. Touch up paint will weather differently than COLORBOND® steel.
- 6 Fencing is backed by a warranty of up to 10 years from BlueScope¹. Warranty is subject to application and eligibility criteria which includes but is not limited to:
 - Installation > 1km from Marine or Industrial (source of Industrial particulate fallout) environment. To find out more visit article 17 - Choosing the right grade of COLORBOND® steel at steel.com.au/articles
 - Fence is installed to manufacturer's guidelines
 - Fence is maintained regularly. For maintenance of COLORBOND® steel see *Technical Bulletin 4* at steel.com.au/library.



MAKE SURE IT'S THE REAL THING

Not all coloured steel fencing is made from COLORBOND® steel so make sure you get what you pay for.

2 SIMPLE STEPS to ensure you get genuine COLORBOND® steel:

- 1 Make sure your invoicing specifies COLORBOND® steel or COLORBOND® steel's ® and TM colour names.
- 2 Check the product you receive. Fencing made from COLORBOND® steel is branded with a subtle laser engraving (on either side of the fence) at least three times on each 2.4m fencing section. If you can't find the engraving, then the panels are not genuine COLORBOND® steel.

PEACE OF MIND

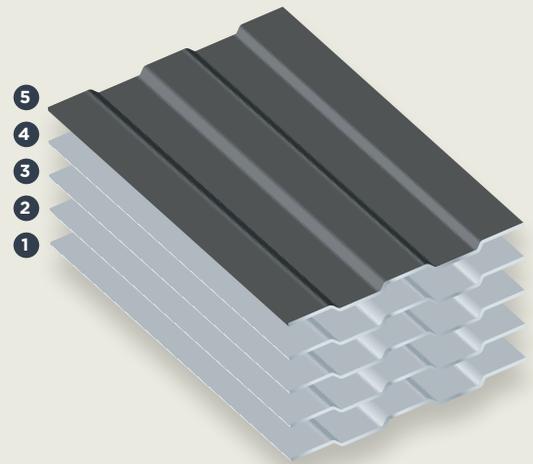
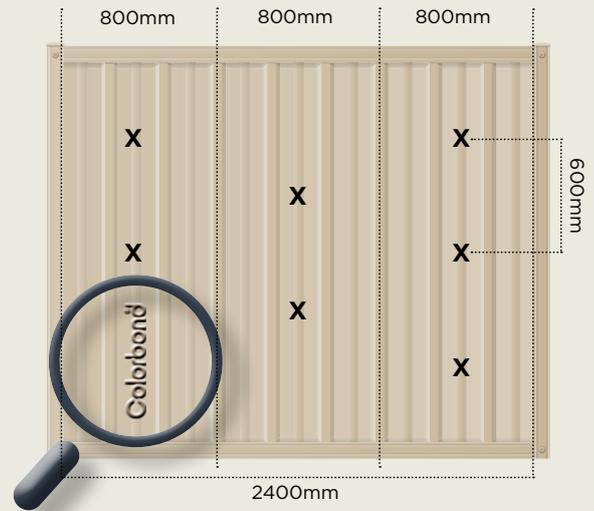
Only COLORBOND® steel is backed by a warranty of up to 10 years from BlueScope¹. It's also made to be compliant with all the relevant Australian Standards, so your decision to choose genuine COLORBOND® steel will give you peace of mind that you've chosen a quality material to last for years to come.

IT'S ALL ABOUT HOW IT'S MADE

It's all about how it's made

Tested in the harshest Australian conditions over the last 50 years, your COLORBOND® steel fence is far more than just 'paint on steel'.

- 1 The steel base is made to meet Australian Standard AS 1397, ensuring strict adherence to the highest quality grade and finish of steel.
- 2 This base is then coated with BlueScope's industry-leading metallic coating with Activate™ technology to provide enhanced anti-corrosion performance.
- 3 A thin pre-treatment layer is applied to enhance the adhesion of further coatings.
- 4 A polyester primer is baked onto the surface.
- 5 A topcoat of specially developed exterior grade lead-free paint (compliant with Australian/New Zealand Standard AS/NZS2728) is baked on for enhanced resistance to chipping, peeling and cracking and to ensure the finish retains its look for longer.



FOR MORE INFORMATION AND INSPIRATION, SIMPLY VISIT
COLORBOND.COM/FENCING OR CALL 1800 022 999

TO APPLY FOR AND ACTIVATE YOUR WARRANTY¹, SIMPLY VISIT
BLUESCOPESTEEL.COM.AU/WARRANTIES

1. Warranty subject to application and eligibility criteria. For full terms and conditions and to determine the eligibility of your fence for the warranty visit www.bluescopesteel.com.au/warranties or call BlueScope Steel on 1800 022 999.

Whilst BlueScope, in cooperation with manufacturers of cold-formed steel residential fencing, has taken considerable care to develop guidelines that are practical and effective, BlueScope acknowledges alternate methods maybe used with the same effect. It remains your responsibility at all times to ensure that the methods you use (including those included in these guidelines) are suitable for the particular situation and where appropriate you should take any additional required precautions.

This installation guide utilises information provided by manufacturers of cold-formed steel residential fencing. Whilst care has been taken in the preparation and compilation of the material contained herein, no responsibility or liability shall be accepted by the Authors and/or BlueScope Steel Limited for any use to which it is put. Information contained in this installation guide is subject to change without notice. Refer to www.steel.com.au for up-to-date technical information.

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