# MODULINE COLORSCREEN FENCING

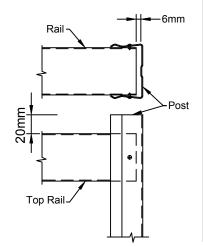
## **Colorscreen Fencing with Mowing Strip**

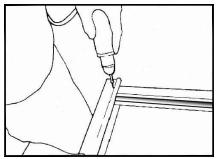
#### **Tools Required -**

- Variable speed electric drill or battery drill on high speed
- 2) Pocket Knife or dinner knife (with strong blade).
- 3) Pair of vice grips or C-clamp vice grips
- Reliable level (Stanley magnetic levels are cheap and accurate)
- 5) 1x Phillips No.2 bit for drill (50 to 70mm long)
- 6) 5x Fence braces (optional)
- 7) 2x Stretchies (supplied)
- 8) 1x Pair Gloves
- **Step 1** Trench out ans set up boxing along proposed fence line. Mowing strip dimensions are 260 x 75.
- **Step 2** Mark out the fencepost centres. Pencil mark on the boxing 2.42 metre centres. Panel width for 2.0 metre high fencing is 1.94 metres. In any length of fence there will almost always be a short length left over.
- **Step 3** Dig or drill holes for the fence posts. 200mm diameter holes fit neatly between the boxing. Holes should be 550 to 600 deep below the top of the boxing.
- **Step 4** Set up a string line 300 to 400 up off the ground. String line the outside edge of the proposed fence. Remember that the fence is only 50mm wide.
- **Step 5** Layout alongside each hole 1 x toprail, 1 x bottom rail (bottom rail has drain holes) and 2 x posts.
- **Step 6** Push the rails and the posts together to make the frames. Join the first post to the top rail on one side only using the self-drilling, self-tapping tek screw and a No. 2 Philips bit. Pre drilling is not necessary. Make sure gaps and measurements are as in the diagram below.

Make sure the end of the rail to the inside of the post is 6mm.

Make sure the top of the rail to the top of the post is 20mm.

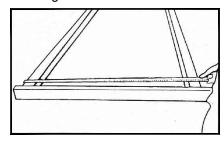




**Step 7** - Measure from the top of the top rail to the bottom of the bottom rail. This dimension depends on your fence height, and whether you are installing on a near level or sloping section. The table below details the dimension for each fence height:

Fence Height Dimensions			
Fence Height	Duopanel Length	Height Over Rails on Sloping Sites	Height Over Rails Near Level Sites
1.8m	1.71m	1.74m	1.72m
1.5m	1.41m	1.44m	1.42m
*1.2m	1.17m	1.20m	1.20m
1.2m	1.11m	1.14m	1.14m
0.9m	0.81m	0.84m	0.84m
2.0m	1.99m	2.02m	2.00m

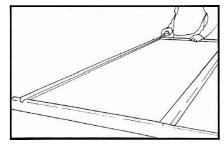
\* The 1.17m Duopanel is used where 1.2m high Colorscreen fencing is required to match 1.2m high Poolside fencing.



**Step 8** - Join the first post to the bottom rail. Make sure the gap between the end of the rail and the inside of the post is 6mm as in the diagram on the left.

**Step 9** - Check the overall width is 2.42m at the top and the bottom (1.94m for 2.0m high fence). Secure other posts as in steps 5-7 above. Make sure you secure the

top rail first, checking the measurements as in Step 5, and the bottom rail second, checking the clearances as in Step 6.



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# **Colorscreen Fencing with Mowing Strip continued**



- **Step 10** Lay small offcuts of boxing across your mowing strip boxing, two pieces between any two holes. This will give you a nice even height above your mowing strip for the bottom rail.
- **Step 11 -** Lift the frame from the bottom rail and slide your first frame into the holes. Temporarily prop upright and concrete the first post into the ground or screw to an existing fence. Whichever the case ensure that the outside edge is just off your string line and the post is plumb.
- **Step 12 -** Plumb the other end by either pushing the post into a small layer of dry mix concrete in the hole or brace the post in position with a brace.
- **Step 13 -** Slide the next frame into the holes. Fix a brace to the far end to stop it flopping about. Slide the first post against the previous panel. Line up the posts and using vice grips clamp the tops of the two posts together.
- **Step 14 -** Tek screw the posts together using 3x Tek screws evenly spaced up the height of the posts then repeat Step 10 for the post at the other end.
- **Step 15 -** You can repeat steps 12 to 14 for another three panels or so and then start concreting your posts into the ground OR you can concrete the posts as you fix each pair of posts together. Use a rod to poke the concrete to ensure all air bubbles are out and the concrete is all around the posts.
- **Step 16** Before the concrete gets too firm check that all your posts are plumb and that the top of your fence is a visually pleasing line.
- Check (A) Stand to the side and check that the top looks even. Lift a post or tap down if it looks uneven. Sometimes a string line across the tops can help.
- **Check (B)** Stand at the end of the fence and make sure that the posts are all in line by looking along the top rail.
- **Step 17 -** Repeat steps 12 to 16 until the whole boundary is completed.

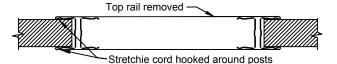
Step 18 - NEXT DAY (preferably not a windy day)

All the frames are concreted in and you will find that the concrete has set and all the posts will be very firm. Now remove the two screws holding each bottom rail and remove all the bottom rails laying the out of the way opposite each panel.

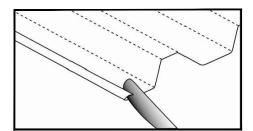
- **Step 19** Pour the mowing strip, either hand mix or if the mowing strip is long enough order in Ready Mix. If your mowing strip is 260 x 75mm then calculate the amount of concrete by multiplying the length of fence by 0.02
- -e.g. 40 metres of fence  $\times$  0.02 = 0.8 cubic metres.

In areas KNOWN to have a lot of ground movement a single D10 reinforcing rod installed will help prevent future breakup of the mowing strip.

- **Step 20** As soon as you have trowelled off your mowing strip put back in place the bottom rails. This time put all the screws into the bottom rails i.e. screws both sides.
- **Step 21** Commencing at the first panel remove the top rail and lay it on the ground.
- **Step 22 -** Hook the Stretchie Cords (supplied) around the fence posts as shown below. These should be approximately 300mm down from the top of the posts. These will support the Duopanel before the top rail is fitted.



- **Step 23– IDENTIFY YOUR DUOPANELS.** For each 2.42 metre section there are 10 Duopanels made up of 1 x LH, 8 x Standard, 1 x RH. For 2 metre high with 1.94 metre wide panels there are 8 Duopanels made up of 1 x LH, 6 x Standard, 1 x RH. Start off with either the Left-hand Duopanel or Right Hand. Establish which way around you desire the ribs on the panels to face (this is important). Most people feel that the ribbed is the better side.
- **Step 24 -** Open up the folded seams at the ends of the Duopanels with a knife as shown below.



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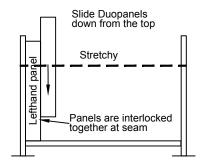
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# **Colorscreen Fencing with Mowing Strip continued**



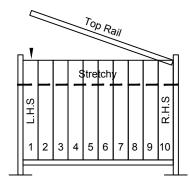
**Step 25** - Starting at one side slip the first Duopanel into the bottom rail (LH or RH panel). Ensure that the top of the Duopanel is between the stretchie. To get the Duopanel to slip into the bottom rail you may have to tap the top with the handle of your hammer, or alternatively use the palms of your hands on either side of the Duopanel and apply downward pressure until the panel slips in the bottom rail.

**Step 26 -** Slide the next Duopanel (standard panel), down the seam starting from the top so that the two Duopanels are locked together. As you slide the panels together, make sure the panels are square. The easiest way to do this is to pull the panel from the bottom, while holding it square at the top with your other hand. It is advisable to WEAR GLOVES.



**Step 27 -** Repeat Step 26 with the remaining Duopanels, finishing with the LH or RH panel remaining (10 in all per 2.42 metre section).

**Step 28** - Put the top rail onto the Duopanels. Start by angling the top rail to one end and slowly work the rail over the panels as you lower the rail.



Note: 8 Duopanels for 2.0 metre high fencing.

**Step 29 -** If possible locate your original holes for Tek screwing the top rail otherwise re Tek screw in-line with the other top rails. Complete this panel by inserting the rest of the Tek screws in the top and bottom rails.

**Step 30 -** Repeat Steps 25 to 29 until all the Duopanels have been installed in your fence line.

**Step 31** - Finish your fence with the plastic post caps supplied.

PLEASE NOTE DO NOT USE AN ANGLE GRINDER OR ABRASIVE CUT OFF BLADES WHEN CUTTING COLORSTEEL.

#### **Assembling Shorter Length Panels**

Many fences will require one or more shorter length panels to make up the desired fence length. You will need to cut down the rails and possibly also the duopanels to achieve this.

**Step 1** - Cut the Rails to desired length using a hacksaw. File the cut to remove burrs, then wipe swarf off inside and outside of rail with a soft cloth.

**Step 2 -** If a whole number of duopanels will not fit, you may need to trim a duopanel to make up the desired width. This can be achieved by one of three ways:

- (A) The easiest and neatest option is to score with a tungsten Hardies scoring knife and hand fold the Duo Panel which will then snap off at the scored width. Hardies Scoring knifes are available for around \$10 from most hardware outlets.
- (B) Take the Duo Panel to your local sheet metal workshop for guillotining.
- (C) Cut down with tin snips.

**Step 3** - For short panels using up to 3 duopanels (or 0.74 metres wide) use only standard duopanels and not LH or RH.

#### **High Wind Areas**

COLORSCREEN fences are designed for high wind zones. Fence posts are made from high tensile steel and heavy duty posts are used for fences over 1.5 metres high.

#### **Extreme High Wind Areas**

In very high wind areas the post centres may have to be reduced. Please discuss this with Moduline.

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