

Introducing...

## Sentrel Balustrades and Pool Fences

... a fresh new look incorporating a beautiful marriage of natural Australian hardwood with marine grade stainless steel to produce safe and affordable protection around decks, lofts, balconies and pools.

### Overview

Sentrel balustrades and pool fences have emerged from the need in the marketplace for a new style product that embraces the advantages and popularity of tensioned cable systems, yet complies with strict new safety legislation. The solution is a vertically tensioned cable system that is manufactured efficiently and effectively.

We supply a quality, high end product at a middle market price, making Sentrel balustrades and pool fences an increasingly desirable choice. We also manufacture and supply gates, pool gates, and stair balustrade.

Sentrel manufactures and distributes nationally from Wauchope NSW.

The following information is presented for you perusal. Further enquiries can be addressed to;

#### Sales

Contact: **Jennifer Fair**  
e. [sales@sentrel.com.au](mailto:sales@sentrel.com.au)  
1300 658 330

#### Technical

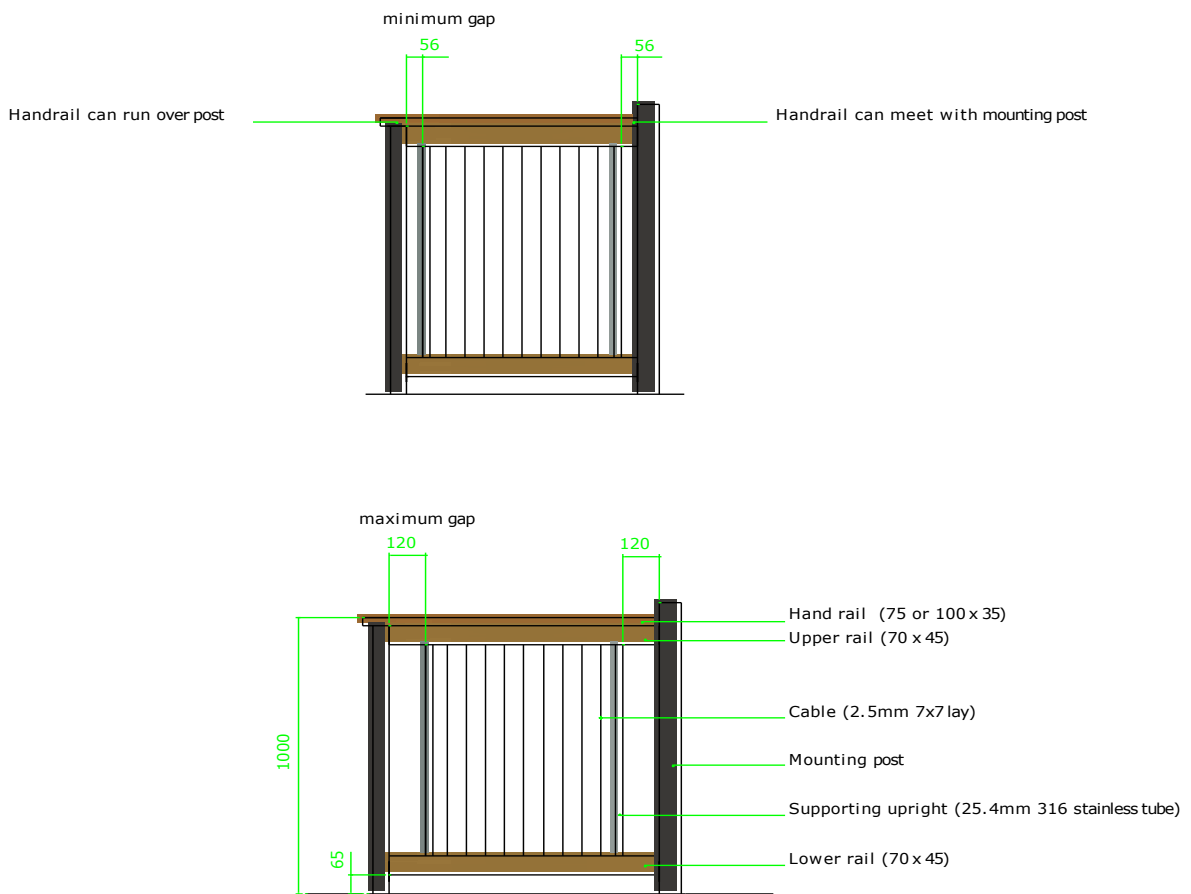
Contact: **Brett Harrison**  
e. [info@sentrel.com.au](mailto:info@sentrel.com.au)  
m. 0413 870 495

# Technical Information

## Sentrel Panels

Balustrade, Pool Fence and Stair Rails are made as finished panels supplied to site ready for installation. Balustrades can be used for both internal and external purposes. Sentrel manufactures 20 standard balustrade panels, 20 standard pool fence panels, and 14 standard stair rail panels.

The panels will fit any distance between posts up to a maximum of 2696 mm for Balustrades, 2501mm for Pool fencing, and 2556 mm for Stair rails. The panels can be trimmed to fit the exact opening between any two posts. As a result the gap between the outside stainless steel supporting upright and the mounting post will vary depending on the panel size and the exact distance between the posts **(Dia. 1)**.



**Diagram 1**  
Sentrel balustrade dimensions  
and configurations

**NOTE:** If it is a design requirement to keep the distance between the outside supporting upright and the mounting post approximately the same for any run of panels, the following tables will assist in specifying openings between posts. For any long run of same size panels, it is important that the posts are spaced equally and accurately to achieve the best, most uniform look.

**The 20 Standard Balustrade Panel Lengths**

BP	to fit gap of
BP 1	137 – 264
BP 2	265 – 392
BP 3	393 – 520
BP 4	521 – 648
BP 5	649 – 776
BP 6	777 – 904
BP 7	905 – 1032
BP 8	1033 – 1160
BP 9	1161 – 1288
BP 10	1289 – 1416
BP 11	1417 – 1544
BP 12	1545 – 1672
BP 13	1673 – 1800
BP 14	1801 – 1928
BP 15	1929 – 2056
BP 16	2057 – 2184
BP 17	2185 – 2312
BP 18	2313 – 2440
BP 19	2441 – 2568
BP 20	2569 – 2696

**The 20 Standard Pool Fence Panel Lengths**

PF	to fit gap of
PF 1	315 – 442
PF 2	443 – 570
PF 3	571 – 698
PF 4	699 – 826
PF 5	827 – 914
PF 6	915 – 1044
PF 7	1045 – 1170
PF 8	1171 – 1298
PF 9	1299 – 1426
PF 10	1427 – 1452
PF 11	1453 – 1516
PF 12	1517 – 1644
PF 13	1645 – 1708
PF 14	1709 – 1836
PF 15	1837 – 1900
PF 16	1901 – 2028
PF 17	2029 – 2116
PF 18	2117 – 2244
PF 19	2245 – 2372
PF 20	2373 – 2500

**The 14 Standard Stair Panel Lengths**

SR	to fit gap of
SR 1	531 - 680
SR 2	681 - 830
SR 3	831 - 980
SR 4	981 - 1130
SR 5	1131 - 1280
SR 6	1281 - 1354
SR 7	1355 - 1504
SR 8	1505 - 1654
SR 9	1655 - 1804
SR 10	1805 - 1954
SR 11	1955 - 2104
SR 12	2105 - 2254
SR 13	2255 - 2404
SR 14	2405 - 2556

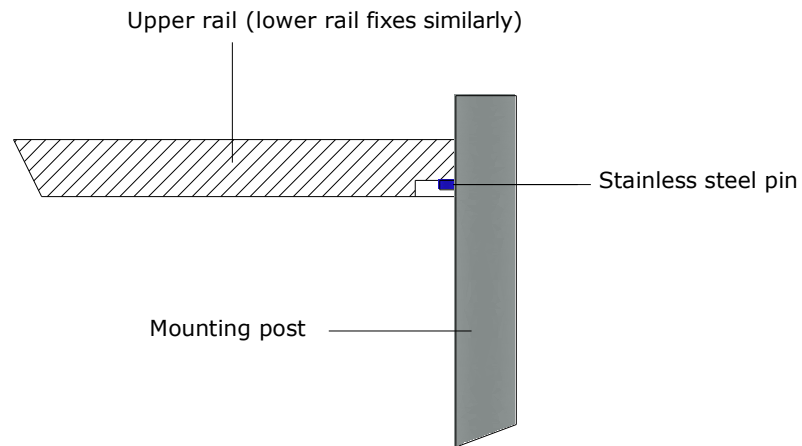


## Materials & Specifications

- The horizontal upper and lower rails are constructed from Australian Hardwoods – specifically Spotted Gum, and are 70 x 45 mm in section. The top handrail is of the same material and can be supplied in 70 x 35, 90 x 35 or 110 x 35 or special sizes and profiles to order. The standard size we supply is 70 x 35 pencil round section.
- The top handrail is screwed to the upper rail and can run *between* mounting posts or *over* the top of the mounting posts (**Dia. 1**). The timbers have been selected for their class 1 durability rating, structural integrity, attractive appearance, low tannin/leaching properties, and compliance with fire rating requirements. For internal use, or where fire rating is not a concern, other hardwood timbers can be used but would be a special order.
- Standard Pool gates are 880mm in width, to fit a 900mm opening
- The supporting uprights that hold the upper and lower rails apart are 25.4mm 316 grade stainless steel tubing, mirror finish. For internal purposes, a 400 grit finish may be used as the brushed appearance is a softer look
- The cable is 2.5mm 7x7 lay 316 grade stainless steel
- All cables are terminated with 6mm copper stop swages
- Plastic sleeves and grommets are injection moulded UV stabilised Acetal
- Mounting pins are 12.7 mm 304 stainless steel
- Finish is Intergrain Nature's Oil
- Internal finish is Lacquer
- Please refer to our website for further information. Installation instructions, and a video explaining the re-tensioning process is available on the technical page

## Installation

- Installation of Sentrel balustrade and pool fence panels is fast and simple (see 'Install Instructions for Sentrel Balustrade panels').
- Panels are trimmed to length and fitted over 12.7mm (1/2 inch) stainless steel pins that are fixed into the posts and received by slots in the underside of the rails (**Dia. 2**). The fit is an 'interference' fit, and there is no need for any further fixing.
- Time required to install is estimated at approximately 10 - 15 minutes/metre/person. Therefore, a team of 2 can install an average domestic job (25 metres) in about 2 - 3 hours.



**Diagram 2**  
Fitting balustrade to  
mounting posts

## Maintenance

- The timber finish used is a good quality decking/exterior oil (Intergrain Nature's Oil) designed to help protect against surface decay, fungus and mould. It is water repelling and assists with dimensional stability. The finish does not peel off or crack. Combined with the natural durability of the timbers, this combination offers a highly stable, structurally sound product that is low maintenance.
- Re-oiling is easy and any good quality outdoor/decking oil can be used. NO sanding is required before reapplying the oil. When applied every 6- 12 months the natural beauty of the timber will be maintained. If no further oil is applied, the timber will simply 'silver' with age, and this can blend with the stainless steel to provide an equally beautiful appearance. Either way, the structure remains reliable over time.
- In harsh environments (close to the ocean), it is recommended to regularly wash stainless steel with soap and water to prevent 'tea staining' over time. We can also recommend products (polishes) that will help protect/and or restore stainless steel
- The vertical cables are tensioned in the factory by 'spreading' the upper and lower cables apart thus creating tension in the cables. There is one continuous cable running between each supporting upright. It is unlikely that these cables will require re-tensioning over time; however, there is provision for this if necessary. Re-tensioning is simple and fast and is achieved by turning the bolts that are accessible under each supporting upright an equal amount. A video showing how to do this is available on the technical page of the website

## Supply

Generally, an average size job (20 – 40 metres) can be supplied within three – four weeks from date of official order.

## Certification

Sentrel balustrades are engineer certified and are suitable for the following occupancy types listed in table 3.3 of AS/NZS 1170.1:2002; A, B, E, C, C1/C2, C3, D, F/G. They are suitable for use at heights over 4 metres. Sentrel pool fences have been engineer certified in accordance with NATA's accreditation requirements.

