

sentrel

PRODUCT INFORMATION

2024

Overview

Sentrel manufactures two unique styles of balustrade and pool fence system:

1. The Vertical Cable Balustrades and Pool Fence System, and
2. The iRail System—a DIY, assemble-onsite product incorporating thin stainless steel tubes

All Sentrel products are manufactured and distributed nationally to site from Wauchope NSW.

Vertical Cable System

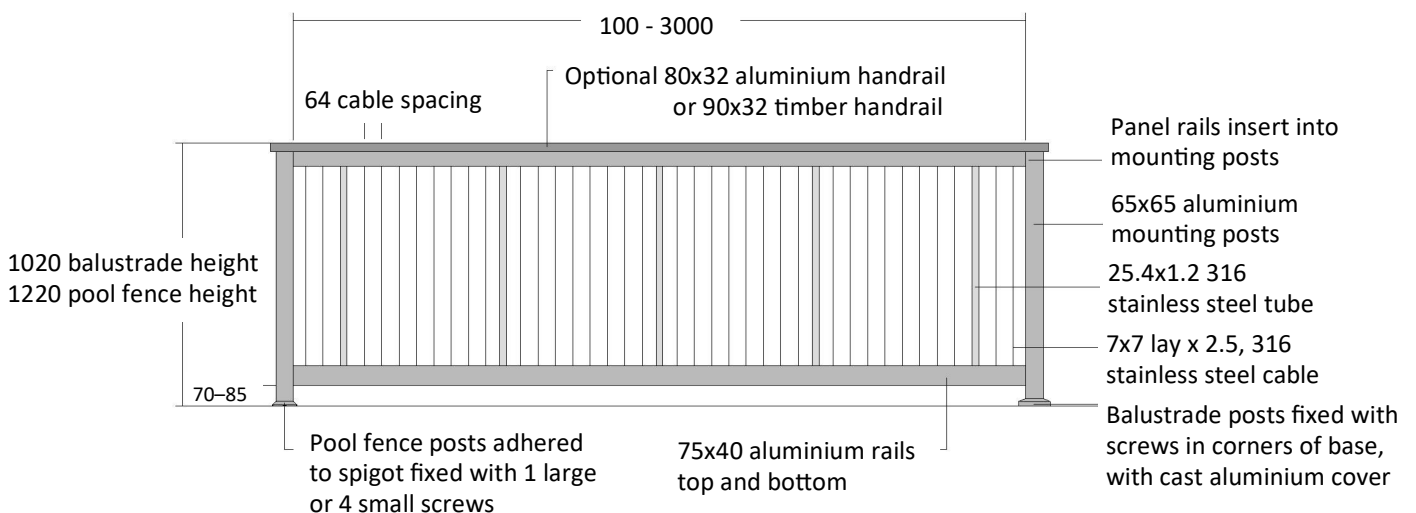
Manufacturing since 2007, Sentrel continues to lead the market with their award-winning vertical cable system that offers high quality, attractive - and, of course, very safe - balustrades and pool fence products. These products emerged from the need in the market for a new style of barrier that embraces the advantages and popularity of horizontal cable systems but comply with strict new safety legislation.

Our flagship product is the Aluminium Vertical Cable Balustrade that incorporates durable powder coat finished horizontal rails and 316 marine-grade vertically-tensioned stainless steel cables. Pool fencing and timber rail options are also available in the vertical cable range.

Specifications

Aluminium System

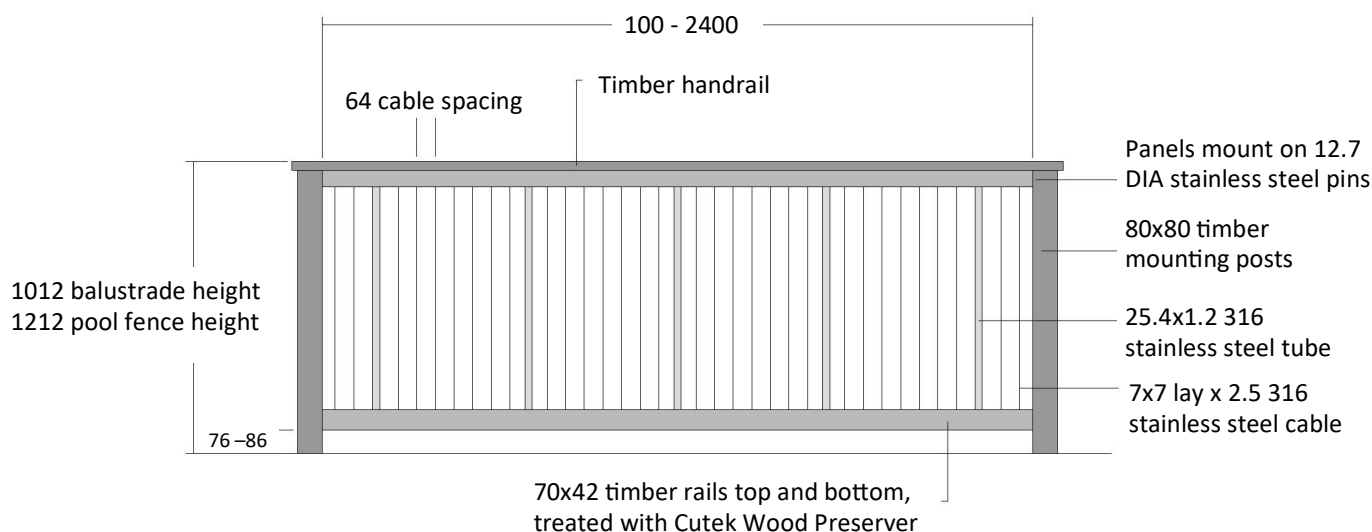
- 44 standard 'ready to install' panels to fit opening sizes from 100 - 3000mm*
- Cables are self-tensioning, maintaining correct tension over time
- Horizontal upper and lower rails made from high tensile grade extruded aluminium
- Handrail options are: no handrail, 80x32 aluminium or 90x32 timber
- Handrail can run between or over the top of mounting posts
- Stair panels and gates are available
- Cables are 2.5mm, 7x7 lay, 316 grade stainless steel
- Supporting uprights are 25.4mm, 316 grade stainless steel tube with high polish finish
- All cables are terminated with 6mm copper stop swages
- All plastic components are injection moulded UV stabilised Acetal



* Panels over 2700 and up to 3000 must only be installed between existing, structurally sound posts

Timber System

- 34 standard panels that are trimmed onsite to fit opening sizes from 100 - 2400mm
- Panels can be easily re-tensioned when required
- Horizontal upper and lower rails are made from 70x42mm spotted gum or merbau
- Handrail options are 90x32, or larger sizes upon request
- All timber is pre-treated in the factory with Cutek Timber Preserver - see section on Timber information below
- Stair panels and gates are available
- Cables are 2.5mm, 7x7 lay, 316 grade stainless steel
- Supporting uprights are 25.4mm, 316 grade stainless steel tube with high polish finish
- All cables are terminated with 6mm copper stop swages
- All plastic components are injection moulded UV stabilised Acetal



Information about Timber

Sentrel manufactures timber products from either select grade spotted gum or merbau. The merbau has FSC Chain of Custody certification that ensures it has been sourced from sustainable, legally-operated forests overseas. The spotted gum is sourced locally and dried in accordance with Australian Standards 2796 and 2082.

We do our best to supply a quality product. However, timber is a natural commodity that cannot be completely controlled—it is susceptible to variation in colour, texture, and performance over time. We warranty our products against faulty workmanship, not degradation of the timber. That said, both merbau and spotted gum are hardy, stable, and durable timbers, and have been selected for use in this application for these reasons. With the correct care, Sentrel timber products will for last many, many years.

Positioning

The positioning of your timber balustrade or pool fence will have an impact on its longevity. Panels positioned in moist conditions may develop rot over time. It is best for all panels to have airflow around them to avoid this risk. The grain of timber in panels installed in hot dry climates may tend to open up. They may also close up in high humidity environments. This is normal, especially for spotted gum.

Timber finishes and maintenance

There are many products on the market today designed to protect or enhance timber, and they all purport to being the best! It can be very difficult to make a choice and, because of this, we have done the research for you. From monitoring the performance of our panels over time, we have learned that the best solution for Sentrel Timber panels is to use *traditional oils*, as opposed to any kind of 'sealing' products like lacquers or varnishes, either mineral or water based.

Traditional oils allow the timber to breathe, whereas varnishes and lacquers seal the timber and trap the moisture within. If moisture enters the timber and cannot also be released, it may become trapped, and this can compromise the quality of the timber.

To this end we pre-treat all timber panels with an extremely good quality preserver made by Cutek. The rails of each panel are soaked in an untinted *Cutek Timber Preserver* which allows the solution to deeply penetrate the timber. Several days later, the rails are then assembled into the panels for your installation.

Only the rails of the panels are pre-treated. Handrail supplied is not treated. You will need to finish the handrail and also continue to maintain the timber in the panels if you wish that it does not 'silver' (go grey) with age. Any quality traditional oil will do the job, however we do recommend the Cutek range with an appropriate coloured tint, as it is the coloured tint in oils that provide UV protection and reduces the rate of 'silvering'.

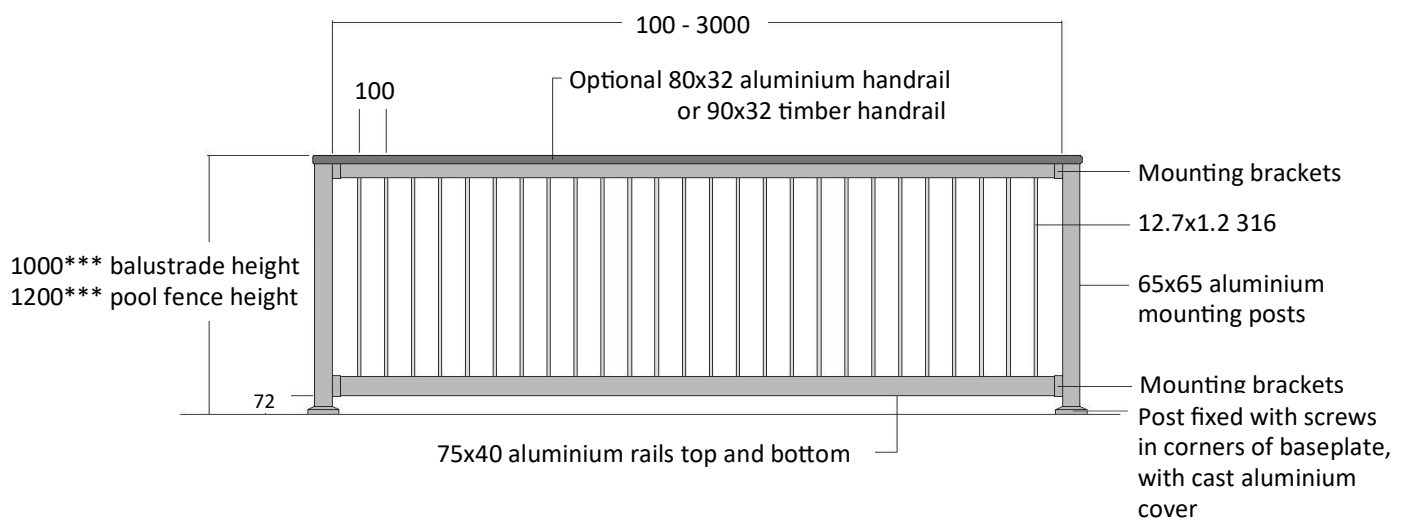
Installation

- Installation of Sentrel balustrade and pool fence panels is fast and simple.
- Aluminium panels are made to exact length and mount to existing posts with proprietary brackets or to Sentrel posts as a part of the aluminium system. See the 'Aluminium Installation Instructions' available to download from our website.
- Timber panels are supplied oversize to be trimmed on site. Panels mount to posts with stainless steel pins that are fitted into the posts and protrude to receive the panels via slots in the underside of the upper and lower rail. See 'Timber Installation Instructions' available to download from our website.
- Time required to fit each panel (once posts have been fixed in place) is approximately 5 minutes for aluminium and 15 minutes for timber.

DIY iRail System

Introduced in 2020, iRail offers a DIY product that incorporates the same quality aluminium horizontal rails with thin tubular stainless steel vertical infill. Due to the DIY nature of this system, significant cost savings are possible. Options for stairways are not available. iRail can be used in conjunction with the vertical cable range.

- Rails are supplied in 100mm increments from 100 - 3000mm*
- 12.7mm, 316 grade stainless steel vertical infill tube with high polish finish at 100mm centres
- The system is suitable for both balustrade and pool fencing
- Posts and mounting brackets supplied, with mounting jig for fast and accurate positioning
- Handrail options are: no handrail**, 80x32 aluminium or 90x32 timber



Information about Stainless Steel

All stainless steel will discolour, 'tea' stain or rust in certain environments if not maintained correctly—even 316 marine grade—due to the build-up of accumulating grime and minerals on the surface over time. The simplest and easiest way to prevent this happening is to wash with mild dishwashing soap and warm water. Put a few drops of detergent in a bucket of warm water, wash down, then rinse off thoroughly. The more aggressive the environment is, the more maintenance will be required. If your installation is in one of the following environments listed below, we recommend that cleaning takes place regularly.

- Coastal areas which have sea spray
- On main roads with excessive carbon monoxide
- Below an air conditioner unit
- Below a wood beam or steel gutter
- Subject to spray from chemicals or bore water holes
- Washing glass or tiles with certain chemicals
- Some borehole waters

* Rails over 2700 and up to 3000 must only be installed between existing' structurally sound posts
** Balustrade panels must be ordered with handrail. The 'no handrail' option is only available for pool fencing
*** Actual heights vary by 20-30mm depending on the handrail option. This information is available upon request

Information about Powder Coated Finishes

Although we are happy to supply our product in any colour of your choosing, we recommend the Duratec Elements range of powder coat for its hard wearing durability. Please note that powder coat is susceptible to attack from pool chemicals and that you must take care that pool fencing—especially the bases of the posts—are kept clean by washing with clean water. Sentrel cannot honour warranty on any powder coat deterioration that can be shown to be the effect of attack by pool chemicals, or chemicals of any other nature.

Other Products

Sentrel makes gates, posts, brackets, and everything you require to get the job done. Orders are shipped directly to your building site with all necessary fasteners for easy installation by yourself or your builder.

Sentrel aluminium products are a beautiful addition to your home and require no maintenance unless in an aggressive environment as outlined in the 'stainless steel care section' above. Sentrel timber products are an equally stylish product that will require a degree of ongoing maintenance.

Supply

Sentrel balustrades and pool fences are made to order. Timber products will be ready for dispatch four weeks from date of order and aluminium products will be ready six weeks from order. iRail products are ready for dispatch within four weeks*.

Certification

Sentrel balustrades are engineer-certified and are suitable for the following occupancy types listed in table 3.3 of AS/NZS 1170.1: 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 AS1926 Set-2012 and NATA's accreditation requirements.

Certification reports can be found on the Resources page at www.sentrel.com.au.