



design elements

## design

The use of wide vertical batten patterns is a classic design technique, introducing subtle optical rhythms into any space as perspective effects alter the apparent profile of the repetitive pattern. A strong vertical element is introduced into the total design, while gaps between battens preserve a sense of space and light.

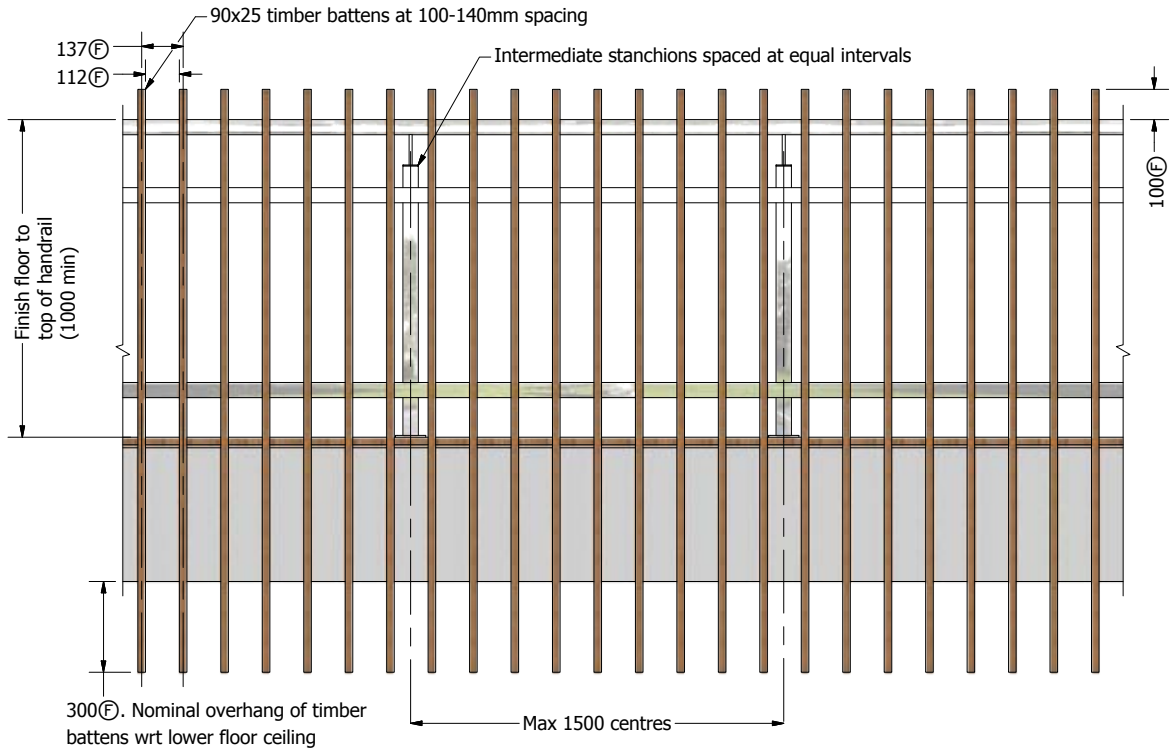
Arden's V1 vertical batten style locates the battens just clear of the bulkhead or staircase tread / stringer. Balustrade infill overlapping or overhanging the bulkhead may be desired to create a more sophisticated style in its own right, but most importantly; this promotes maximum flexibility for the architect in determining the length of overhang to accomplish specific functional or visual goals. These may include linking the balustrade with a full height partition, screen, or staircase balustrade in the same style. Satin stainless frames, stanchions and CHS handrail provide a welcome contrast with the warm tones of the timber.

**Figure 1.** Front elevation. Vertical battens overhang void edge floor to create a long profile. Amount of overhang may be varied within a single run for specific architectural statements. Top extent of battens is usually placed approximately 100mm above the handrail level.

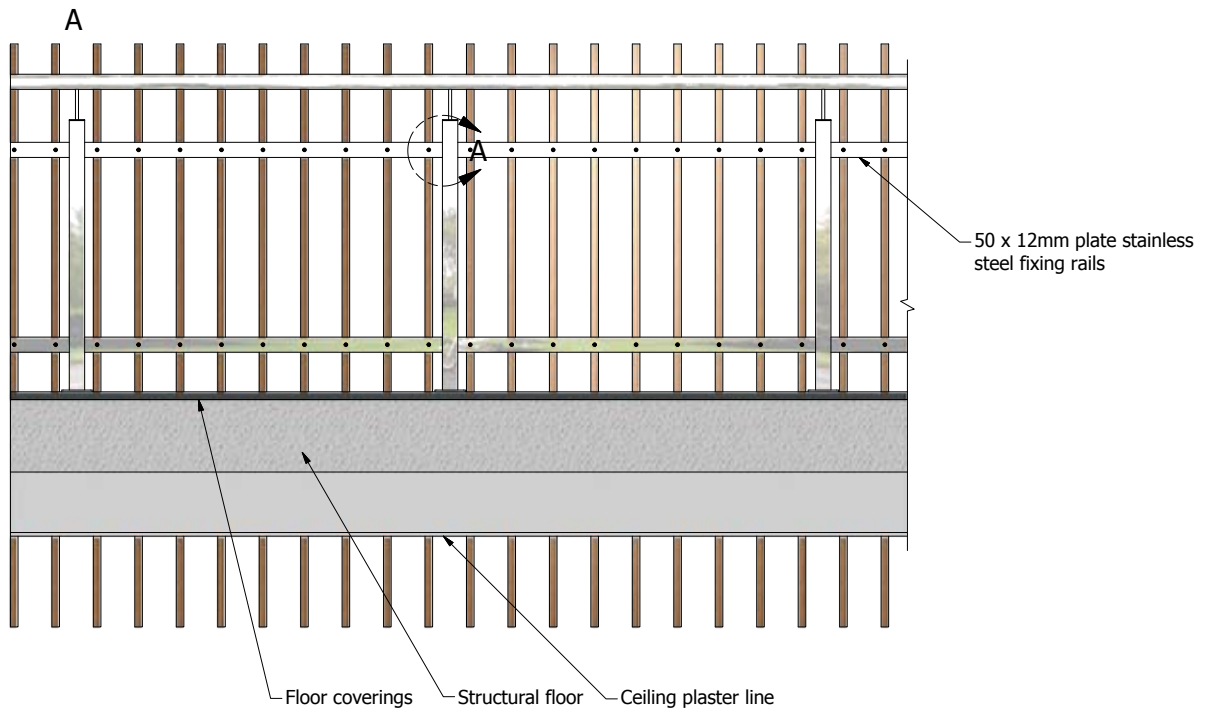
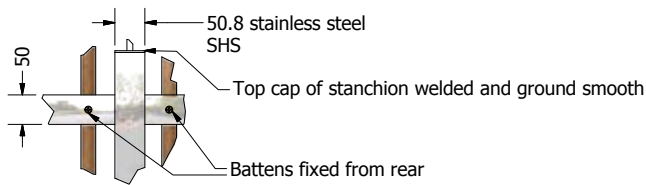
**Figure 2.** Back elevation. Stainless steel handrail stanchions and cross-bars contrast agreeably with the timber infill. Spacing of stanchions and battens is managed so that stanchions occur at the mid-point between battens.

Ⓔ indicated on dimensions denotes a nominal dimension that typically varies according to specific application, engineering requirements or client preferences.





1



2

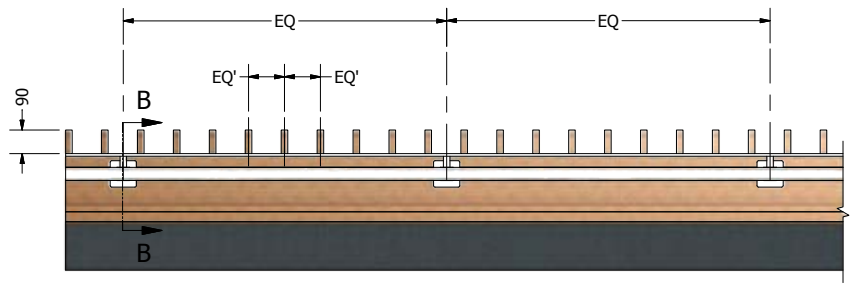
**technical**

Standard installation is 90x32mm or 90x25mm pre-finished select grade premium hardwood species battens mounted to satin stainless frames, and continuous 38.1mm or 50mm CHS stainless steel handrail.

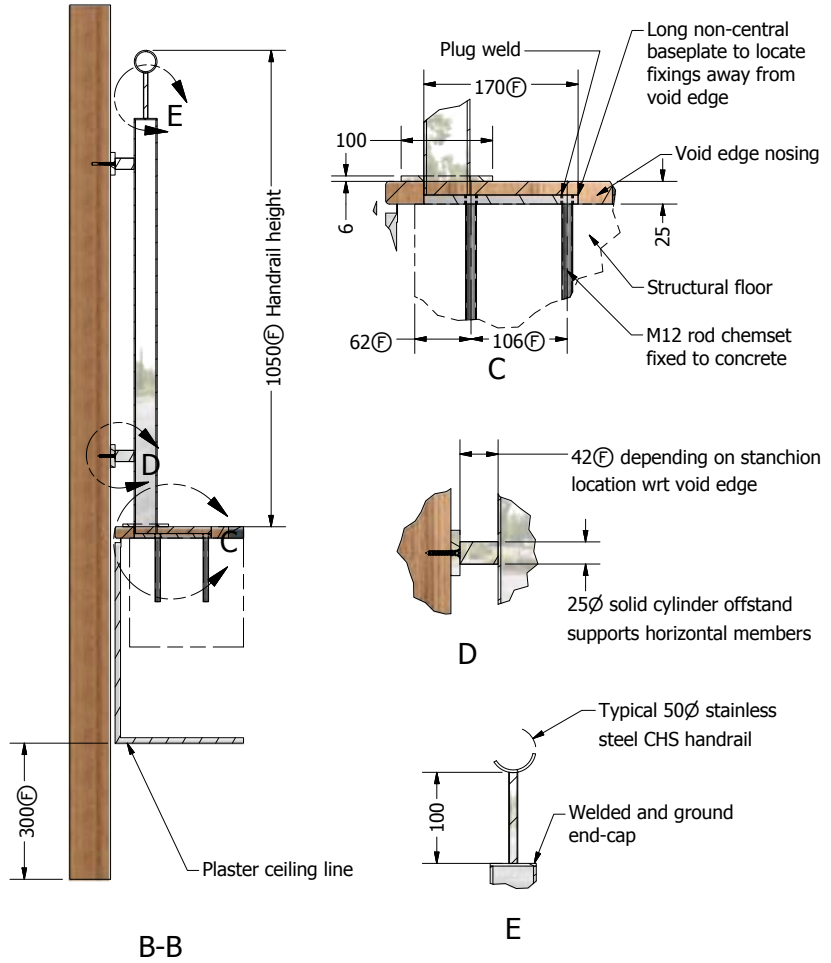
Heavy duty mild steel base plates concealed beneath edge trim or floor coverings transfer the potential loads to fixings located away from the void edge.

Figure 3. Plan view. Offset base plates (see figure (4)) allow stanchions to be situated close to the void edge, maximising traversable floor space. Vertical battens are generally set up so as to be virtually flush with the bulkhead plaster line.

Figure 4. Stanchion section showing fixing and fabrication details.



3



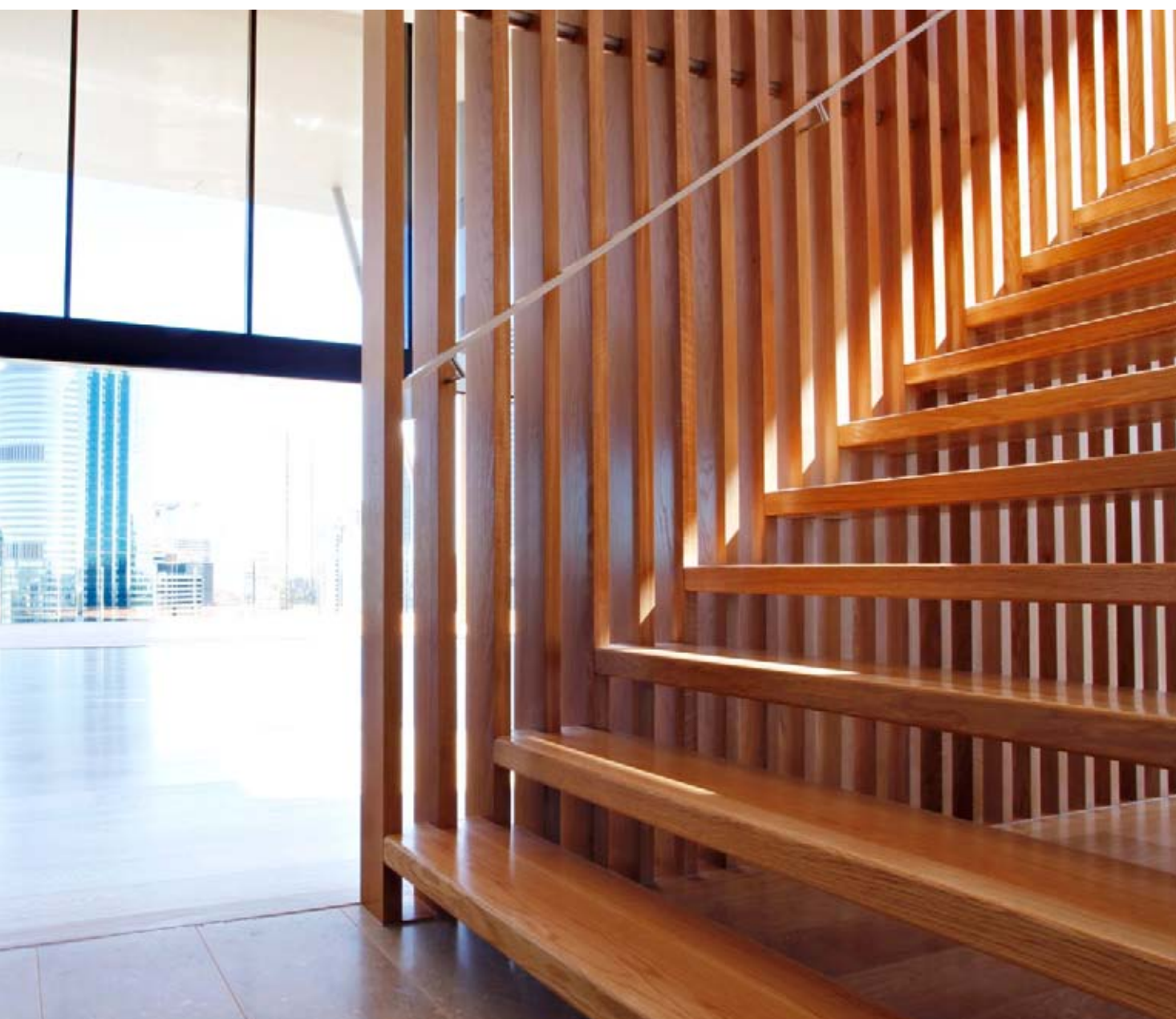
4

Ⓢ indicated on dimensions denotes a nominal dimension that typically varies according to specific application, engineering requirements or client preferences.





Vertical timber batten balustrade



V1

Figure 5. Isometric view of void edge balustrade section.



**About this document**

Intellectual property is copyright © Archstairs Pty Ltd unless otherwise agreed in writing. All rights to the document are retained. Any use of the document by clients or third parties, unless specifically authorised by Archstairs Pty Ltd, are at their own risk and the user releases and indemnifies Archstairs Pty Ltd from and against all loss or damage arising from such use.



## compliance

Arden is a BSA licensed contractor for carpentry, joinery, glass, glazing and aluminium as well as structural metal fabrication and erection. Arden supplies a Form 16 (Licensed Contractor) on all projects. In design and construct contracts, a Form 15 (Design Engineer) certification is supplied upon request. For products and services incorporating the V1 system, this table shows compliance with relevant codes and standards.

### Key

- full compliance with the code
- not applicable to this element

Code	Title	Applicability
BCA	The Building Code of Australia	●
AS NZS 1170.1-2002	Structural Design Actions – Permanent, imposed and other actions	●
AS 1288-2006	Glass in Buildings. Selection and installation.	○
AS NZS 1554.1-2004	Structural steel welding - Welding of steel structures	●
AS 1554.6-1994	Welding stainless steels for structural purposes	●
AS NZS 4586-2004	Slip resistance classification of new pedestrian surface materials	○
AS 1428.1-2009	Design for access and mobility	●
AS 1657-1992	Fixed platforms, walkways, stairways & ladders. Design, construction and installation	●

## design note

**For all commercial applications, it is important that sufficient space for the stairwell cavity be allowed to satisfy Australian Standards and BCA requirements.**

The footprint is primarily driven by the floor to floor rise, as well as the staircase configuration chosen. However, stringer and balustrade style design may increase the amount of space required. Allowing too small a cavity can restrict the design options of the staircase. Also, points at where the staircase interacts with other structures are best addressed early in the design cycle.

Consultation with Arden early on will help ensure that these design issues can be addressed in a cost-effective manner.

[www.arden.net.au](http://www.arden.net.au)

phone (07) 3267 6100 | fax (07) 3267 6500 | email [admin@arden.net.au](mailto:admin@arden.net.au)

Office & factory: 46 Radley Street Virginia Qld 4014 Australia    Postal address: PO Box 317 Virginia Qld 4014 Australia

Version 1.0. Design by [www.cazazz.com](http://www.cazazz.com)

