



Child friendly environment

Kids will be kids – We all know children can climb so it is important to follow the recommendations below.

For every part of the balustrade solution, assess whether there is risk or danger. Where a balustrade has to be designed to prevent kids from falling through or falling over, consider three simple pieces of advice:

The 100mm sphere rule

BS6180:1999 5.3 states that in dwellings and buildings that cater for children under 5, there should not be gaps large enough to permit a 100mm sphere to pass through.

Infill panels

Infill panels rather than horizontal rails are recommended between balusters to prevent climbing over the guarding.

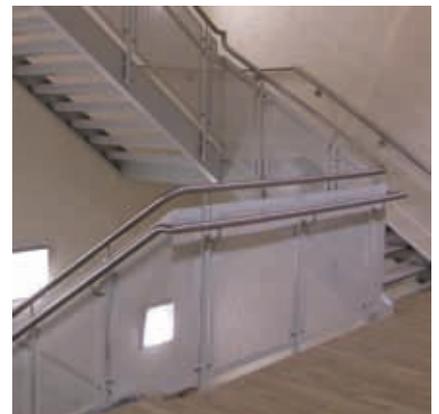
High guarding

Consider designing a guarding panel which extends above the handrail height to minimise the risk of children toppling over the handrail. Typically Sapphire recommends the guarding panel is extended up to 1400mm height above finished floor level.

Double handrail

In certain situations a second handrail may be required by regulation, e.g. BS8300:2009 5.10.1 In all buildings used by the general public, a second handrail should be installed 600mm from the ramp surface or pitch line.

In other situations a double handrail or second hand rail may provided to help the user 'feel' safer or more welcome. Not only children but also people with certain disabilities appreciate an intermediate handrail between the ground and the upper rail.



Climbing

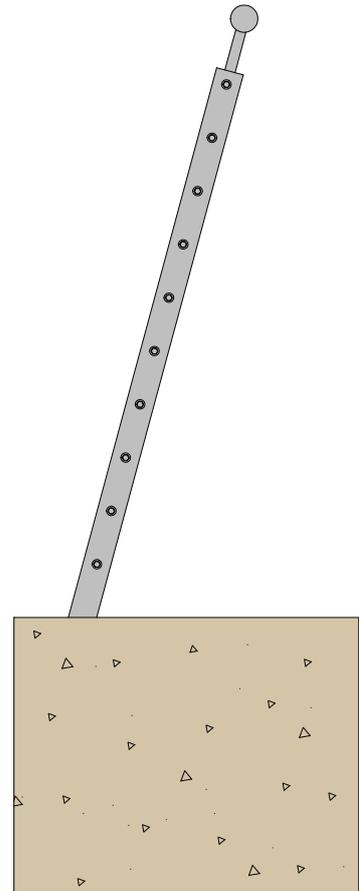
If horizontal wires/midrails are wanted for aesthetics, what can be done?

Solution 1 > Use glass infill panels behind the wires/midrails (Recommended by Sapphire)

Solution 2 > Incline the balusters making the balustrade difficult to climb



Solution 1 Aesthetics mid-rails behind glass infill panels



Solution 2 Inclined balustrade section

The 100mm sphere rule

BS6180:1999 5.3 states that balustrades in dwellings and buildings that cater for children under 5, they should not have gaps large enough to permit a 100mm sphere to pass through. This drawing shows our typically recommended dimensions best suited to avoiding climbability and meeting the 100mm sphere rule.

