

Side Mounted Glass Balustrade System

Technical Specification — 42.4 mm side fix stainless steel posts and handrail with 10 mm toughened glass — satin 316

This sheet describes the side mounted (side fix) Post & Handrail glass balustrade system supplied by The Outdoor Look: 42.4 mm round stainless steel posts fixed to the face of the structure, carrying a continuous 42.4 mm handrail, with 10 mm toughened glass held between the posts in glass clamps. It is supplied in satin 316 stainless steel only. It sets out the specification, the rules every job is worked to, and the conditions of use.

Designed in line with BS 6180:2011. The finished height is 1100 mm to the top of the handrail on level runs. The system must be installed to the approved layout, at no more than 1200 mm post centres, and fixed into structure able to carry the loads.

01 WHERE THIS SYSTEM CAN BE USED

Side fix posts fix to the face of the structure instead of on top of it, keeping the full width of the walking surface clear. UK building regulations require guarding wherever there is a drop of more than 600 mm, and guarding must be at least 1100 mm high for external balconies, terraces and decking.

Suitable for

- Raised decks, fixed to the rim joist or edge structure
- Balconies and landings with a solid edge to fix to
- Stairs, fixed to the stair string, with the handrail following the pitch
- Pool surrounds and coastal sites

Check with us first

- Commercial and public areas, or anywhere people may gather or crowd against the barrier
- Any project where the specifier needs load test evidence or calculations
- Any edge where you are unsure what the posts will fix into

If you are unsure which applies to your project, call 01282 526428 before ordering.

02 PRODUCT & MATERIAL SPECIFICATION

System type	Glass infill clamped between side fix posts · continuous handrail on saddles
Finish	316 marine-grade stainless steel, brushed, uncoated (satin)
Post	42.4 mm diameter tube · side fix through the lower section of the post
Post length	1178 mm overall, without post-top fitting
Height above floor	978 mm from finished floor level to the top of the post
Fixing holes	2, at 100 mm centres, in the section below finished floor level
Clamp centres	600 mm, centre of bottom clamp to centre of top clamp
Top clamp	150 mm below the top of the post
Handrail	42.4 mm stainless steel tube · stock lengths 5800, 3000, 1500 and 1200 mm
Finished height	1100 mm to the top of the handrail on level runs
Glass	10 mm toughened safety glass to BS EN 12150 · polished edges, dubbed corners · 900 mm high
Stock glass widths	300 to 1100 mm in 100 mm steps, clear
Cut-to-size glass	Clear or tinted · all stair glass
Fixings	Not supplied — fixings suited to the structure, selected by the installer

03 POST TYPES

TYPE	SUPPLIED WITH	USED WHERE
End post	2 glass clamps, one face	Each end of a section
Mid post	4 glass clamps, two opposite faces	Between two panes on a straight run
External corner post	Glass clamps · external corner wall bracket	An outside corner, such as the corner of a raised deck
Internal corner post	Glass clamps · internal corner wall bracket	An inside corner, where the structure turns inwards

The side fix range has no blank post. Where the glass stops but the handrail must carry on, contact us before ordering.

04 HANDRAIL FITTINGS

FITTING	WHERE IT GOES
Fixed saddle	Top of every level end and mid post
Adjustable saddle	Top of every stair post, so the rail follows the pitch
90° end elbow bracket	Top of a corner post
Adjustable elbow	In the tube wherever the rail changes pitch, such as level to stair
In-line tube connector	At each joint between tube lengths, on straights only
End cap or 90° scroll end	Each open end of handrail
Wall flange	Where the handrail runs to a wall

The handrail fittings, tube and glass are the same satin parts used on our surface-fix Post & Handrail system. Posts take no cap of their own: the saddle sits on the post top.

05 SETTING OUT

PARAMETER	VALUE	BASIS
Maximum post centres	1200 mm	The Outdoor Look standard
Post top	978 mm above finished floor level	Post geometry
Section ends	Always an end post — posts never finish on a wall	The Outdoor Look standard
Corners	An external or internal corner post on its corner bracket	Post range

Every post is set so that its top is 978 mm above the finished floor level, which puts the handrail at 1100 mm. The handrail may continue past the last post to a wall and finish on a wall flange. Stock glass widths are used wherever the run allows. Where a run cannot be divided into stock widths, one pane or every pane on that leg is cut to size. Stair legs are never stock: each raked pane is cut to size from a template, measured along the pitch post to post. Every job is drawn up for approval before any glass is cut.

06 STANDARDS & STRUCTURAL PERFORMANCE

The system is designed in line with BS 6180:2011 *Barriers in and about buildings*, with an 1100 mm finished height to the top of the handrail on level runs.

Performance depends on the installation as much as the components: post centres no greater than 1200 mm, every post plumb and fully fixed, and structure able to carry the loads. A side fix post puts its load into the face it is fixed to, so the edge structure matters more than with posts fixed on top. Responsibility for the supporting structure and the fixings rests with the installer or building designer.

Where a project requires load test evidence or structural calculations, contact us before ordering. The 1200 mm maximum post centre is **our own setting-out standard**; it is not a load rating and must not be presented as one.

STANDARD	COVERS
BS 6180:2011	Barriers in and about buildings — code of practice
BS EN 10088	Stainless steel material performance
BS EN 12150	Thermally toughened soda lime silicate safety glass

316 is the most corrosion-resistant stainless grade in common architectural use and suits coastal and poolside sites with routine cleaning.

07 CONDITIONS OF INSTALLATION

- Fix into solid structure — on decking, the rim joist or added blocking, never cladding or fascia boards alone
- Use stainless steel fixings suited to the structure — dissimilar metals cause galvanic corrosion
- Fixings are not supplied; the correct fixing depends entirely on the structure
- Set every post plumb, at the drawn centres, with its top 978 mm above finished floor level
- Allow any resin anchors to cure fully before glazing
- Fit the saddles and handrail before the run is put into use — the system is not complete without the handrail
- Always fit the clamp gaskets — glass must never be clamped directly against metal
- Toughened glass cannot be cut, drilled or worked after manufacture; any attempt will shatter the pane
- Check every pane on delivery and report any damage within 48 hours
- Do not drill or modify posts, clamps, brackets or fittings

08 INSPECTION & HANDLING

- Inspect at least once a year: posts firm on their fixings, handrail secure in every saddle, clamp screws tight, gaskets in place, glass free of chips and cracks
- Replace any chipped or cracked pane — toughened glass cannot be repaired
- Carry glass on edge, never flat, with two people for larger panes; wear gloves
- Store panes upright on timber bearers, never on concrete or stone, and protect the edges
- Secure the work area and the area below the edge while installing and glazing

All stainless steel components are fully recyclable.

This sheet describes the side mounted Post & Handrail glass balustrade system only. It does not state that this system is "compliant with" or "meets" UK Building Regulations.