

Spigot Glass Balustrade System

Technical Specification — square Duplex 2205 stainless steel spigots with 10 mm or 17.5 mm glass — black and satin

This sheet describes the spigot glass balustrade system supplied by The Outdoor Look: frameless glass panels held at the foot on square spigots in Duplex 2205 stainless steel, with an optional 30 × 28 mm aluminium top rail. It is supplied in satin (brushed) or black (powder-coated). It sets out the specification, the setting-out rules every job is worked to, and the conditions of use.

Glass is chosen by the drop. Under 600 mm: 10 mm toughened glass. 600 mm or more: 17.5 mm toughened laminated glass, with two spigots per panel fixed 150 mm in from each edge. At a drop of 600 mm or more the system is designed in line with BS 6180:2011 for homes. It must be installed to the approved layout and fixed into a solid structural base.

01 WHERE THIS SYSTEM CAN BE USED

The spigot system is for homes. It is used in two ways, set by the drop on the open side of the balustrade.

DROP	USE	GLASS
Under 600 mm	Low-level screen — patios, garden steps, pool surrounds, decking close to the ground	10 mm toughened
600 mm or more	Guarding — raised decks, terraces and balconies at houses	17.5 mm toughened laminated

Check with us first

- Commercial and public areas — bars, restaurants, shops, or anywhere people may gather or crowd against the barrier
- Any project that needs 21.5 mm glass, load test evidence or structural calculations
- Fixing into anything other than a solid structural base

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

02 PRODUCT & MATERIAL SPECIFICATION

System type	Frameless glass panels clamped at the foot on bolt-down spigots · optional top rail
Spigot	Square spigot, 147 mm high · one spigot suits all glass from 10 to 21.5 mm
Base plate	Oval, 130 × 60 mm, 6 mm thick · two 17.2 mm fixing holes at 100 mm centres
Supplied with each spigot	Glass inserts and spacers to suit the glass thickness · two M10 grub screws
Satin finish	Duplex 2205 stainless steel, brushed, uncoated
Black finish	Duplex 2205 stainless steel, black powder-coated
Height to glass	45 mm, base of the glass above the base of the spigot
Base plate cover	One per spigot, matched to the finish, hides the fixing bolts
Glass under 600 mm drop	10 mm clear toughened safety glass to BS EN 12150 · polished edges, dubbed corners · 1024 mm high
Glass at 600 mm drop or more	17.5 mm clear toughened laminated glass — two toughened sheets bonded with a PVB interlayer · polished edges, dubbed corners · 1087 mm high
Finished height	About 1070 mm (10 mm glass) or 1130 mm (17.5 mm glass) to the top of the glass, before the top rail
Top rail	Aluminium 30 × 28 mm slotted profile, 3 m lengths · satin anodised or black powder-coated RAL 9005
Fixings	Ground fixings not supplied — stainless steel anchors suited to the structure, by the installer

03 GLASS

DROP	GLASS	PANEL HEIGHT	MAX PANEL WIDTH	STOCK WIDTHS
Under 600 mm	10 mm toughened	1024 mm	1100 mm	400 to 1100 mm in 100 mm steps
600 mm or more	17.5 mm toughened laminated	1087 mm	1000 mm	500 to 1000 mm in 100 mm steps

Stock widths are used wherever the run allows. Where a run cannot be made up from stock widths, one panel or every panel on that leg is cut to size. Stair glass is never stock: each raked panel is cut to size from a template. A 1000 mm panel of 17.5 mm laminated glass weighs around 48 kg.

04 TOP RAIL & FITTINGS

PART	WHERE IT GOES
Top rail, 3 m	Along the top edge of the glass, cut to length on site
Rail gasket	Inside the rail, sized to the glass: 8–11 mm gasket for 10 mm glass, 16–17.5 mm gasket for 17.5 mm glass · same metres as rail
90° corner	At each right-angle corner · 342 mm inside arm each side
Internal connector	At each joint between rail lengths on a straight run
End cap	Each open end of rail — two per section
Mitre cut	Where the rail changes pitch, such as level to stair · cut on site, no fitting

The top rail is optional on level runs. It is all or nothing across a job: if any part of the balustrade runs up stairs, the rail is fitted along the whole balustrade. Glass stiffeners for corners, in-line joints and walls are available on request and are not part of the standard kit.

05 SETTING OUT

PARAMETER	VALUE	BASIS
Spigots per panel	2, with a base plate cover on each	The Outdoor Look standard
Spigot position at 600 mm drop or more	150 mm in from each panel edge, so never more than 700 mm apart	The Outdoor Look standard
Joint between panels	12 to 32 mm, 20 mm nominal	The Outdoor Look standard
Allowance at a free end or wall	20 mm	The Outdoor Look standard
Allowance at a corner	85 mm, so the base plate clears the return	The Outdoor Look standard
Minimum panel width	400 mm	The Outdoor Look standard

Every job is drawn up for approval before any glass is cut. Changing the layout on site — wider panels, fewer spigots, spigots moved out from the panel edges — breaks the link to the approved layout and must not be done without speaking to us.

06 STANDARDS & STRUCTURAL PERFORMANCE

At a drop of 600 mm or more, with 17.5 mm toughened laminated glass, panels no wider than 1000 mm and spigots 150 mm in from each panel edge, the system is designed in line with BS 6180:2011 *Barriers in and about buildings* for homes. It is not intended for commercial or public areas.

Performance depends on the installation as much as the components: every spigot fully fixed into a solid structural base such as concrete, a steel frame or a retaining wall, at the drawn positions. Responsibility for the supporting structure and the fixings rests with the installer or building designer.

Test evidence. Our manufacturer has supplied Lucideon test report 173446 for its Duplex 2205 glass spigot with 17.5 mm toughened laminated glass, which passed the BS 6180 domestic line loads of 0.36 and 0.74 kN/m. Available on request. Test results apply to the samples tested.

Where a project requires structural calculations, or loads above the domestic figures, contact us before ordering. The setting-out values in section 05 are **our own standard**; they are 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 12150	Thermally toughened soda lime silicate safety glass

07 CONDITIONS OF INSTALLATION

- Fix every spigot into a solid structural base — concrete, a steel frame or a retaining wall. Not paving laid on sand, and not deck boards
- Use stainless steel anchors suited to the structure — dissimilar metals cause galvanic corrosion
- Ground fixings are not supplied; the correct fixing depends entirely on the structure
- Set every spigot at its drawn position on a flat, level base, and allow anchors to cure fully before glazing
- Use the 10 mm toughened glass only where the drop is under 600 mm
- Fit the inserts and spacers supplied for the glass thickness — glass must never be clamped directly against metal
- Fit the rail gasket that matches the glass thickness
- Toughened and laminated toughened glass cannot be cut, drilled or worked after manufacture
- Check every panel on delivery and report any damage within 48 hours
- Do not drill or modify spigots, covers, rail or fittings

08 INSPECTION & HANDLING

- Inspect at least once a year: spigots firm, covers in place, glass secure in every spigot, rail secure, glass free of chips and cracks
- Replace any chipped or cracked panel — toughened glass cannot be repaired
- Carry glass on edge, never flat, with two people; laminated panels are heavy — use lifting aids for larger panels; wear gloves
- Store panels upright on timber bearers, never on concrete or stone, and protect the edges
- Secure the work area while glazing

All stainless steel and aluminium components are fully recyclable.

This sheet describes the spigot glass balustrade system only. It supersedes any earlier statement that this system is "compliant with" or "meets" UK Building Regulations, or that its spigots are 316 stainless steel.