

Introduction

The Spigot Handrail System by The Outdoor Look is designed and manufactured to meet the highest standards of quality, safety, and compliance within the UK construction industry.

This guide outlines the relevant technical specifications, compliance certifications, and safety standards that apply to the system, ensuring both installers and end users can have complete confidence in the product's performance.

System Overview

The Spigot Handrail System is a frameless glass balustrade system that combines precision-engineered Duplex 2205 stainless steel spigots with toughened safety glass.

It is suitable for use in:

- Residential and commercial outdoor decking areas
- Balconies, patios, and pool surrounds
- Stairways and level balustrade installations

The system provides a minimal, modern aesthetic while maintaining full compliance with structural loading and safety requirements.

Technical Specifications

Glass Panels:

- Thickness: 10 mm to 21.5 mm toughened or laminated toughened safety glass
- Conforms to BS EN 12150 (Toughened Safety Glass) and BS EN 14449 (Laminated Safety Glass)

Spigots:

- Material: Stainless Steel Duplex 2205
- Finish: Satin
- Height to Glass (with Packer Fitted): 45 mm
- Fixings: Suitable for concrete, steel, or timber substrates with appropriate mechanical anchors

System Design:

- Post-free design using base-mounted spigots
- Compatible with optional top handrails where required for compliance
- Drainage outlets integrated into spigots to prevent standing water

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Structural Performance & Load Testing

The Spigot Handrail System has been independently tested to verify compliance with UK building performance standards.

Load Requirements

Testing has been conducted in accordance with:

- BS 6180:2011 Barriers in and about buildings Defines loading and design criteria for safety barriers.
- BS EN 1991-1-1 (Eurocode 1)
 Establishes loadings for different building applications.

Performance Results

- Residential Domestic Use (Category A1/A2):
 Achieved a uniform line load of 0.74 kN/m
- Commercial and Public Areas (Category C1/C3):
 With laminated toughened glass, the system achieved 1.5 kN/m

These results confirm suitability for residential decks, balconies, and light commercial environments when installed as per The Outdoor Look's installation guidelines.

Safety Standards & Certification

Glass Safety

- All glass panels must comply with BS EN 12150 (for monolithic toughened glass) or BS EN 14449 (for laminated systems).
- Edges must be polished or arrissed to prevent chipping during installation.
- Toughened glass ensures safe breakage behaviour when broken, it fractures into small, blunt fragments.

Stainless Steel Materials

- Duplex 2205 stainless steel provides enhanced corrosion resistance, exceeding the requirements of AISI 316 in marine and high-humidity environments.
- All spigots are manufactured to ISO 3506 and EN 10088-2 standards.



Fixings & Anchors

- All fixing bolts, anchors, and substrate supports must meet the relevant mechanical strength requirements of BS 8539:2012 Code of Practice for the Selection and Installation of Anchors.
- Only approved fixings recommended by The Outdoor Look should be used to maintain certification validity.

Finishing & Surface Protection

- The satin finish on Duplex 2205 stainless steel is produced according to EN 10088 standards for surface texture and finish uniformity.
- Anti-tea-staining polish or protective coatings are recommended for coastal or chlorinated environments.

Installation Compliance

Installer Responsibilities

- Installation must be carried out by competent professionals familiar with structural glazing and barrier systems.
- All work must conform to UK Building Regulations Part K (Protection from falling, collision and impact).
- Ensure substrate load-bearing capacity is verified before installation.

Site Considerations

- All fixings must be corrosion-resistant and suitable for the substrate.
- Ensure no electrical earthing or dissimilar metal contact occurs with the spigots.
- Drainage holes must remain unobstructed at all times.
- Glass alignment must be verified before final tightening.

Documentation

A full installation record, including substrate verification, torque settings, and glass specification, should be retained for compliance and warranty purposes.



Maintenance & Inspection Requirements

To remain compliant with BS 6180 and Part K, the Spigot Handrail System must be inspected and maintained regularly:

- Frequency: Minimum every 12 months, or every 6 months in coastal or poolside environments.
- Scope: Check for corrosion, loose fixings, or glass movement.
- Corrective Actions: Replace worn gaskets or fasteners immediately.
- Record Keeping: Log inspection and maintenance activities for audit and warranty validation.

Health & Safety Guidance

- Always wear appropriate PPE (gloves, eye protection, and safety footwear) when handling glass and stainless steel.
- Use certified lifting and handling equipment when moving glass panels.
- Do not drill or modify glass under any circumstances.
- Ensure the installation area is cordoned off during fitting to prevent accidents.
- Avoid direct exposure of stainless steel components to hydrochloric acid or bleachbased cleaners

Environmental Responsibility

- The Spigot Handrail System is designed with sustainability in mind:
- Stainless Steel Duplex 2205 is fully recyclable and has a long lifecycle with minimal maintenance.
- Toughened Glass can be recycled through specialist processors.
- Packaging materials used by The Outdoor Look are recyclable or sourced from sustainable suppliers.

Compliance Summary

The Spigot Handrail System from The Outdoor Look complies with the following key standards:

- BS 6180:2011 Barriers in and about buildings
- BS EN 12150 Toughened safety glass
- BS EN 14449 Laminated safety glass
- BS 8539:2012 Selection and installation of anchors
- BS EN 1991-1-1 (Eurocode 1) Structural loading
- Part K UK Building Regulations Protection from falling
- EN 10088 / ISO 3506 Stainless steel material standards