

OPERATION & MAINTENANCE MANUAL



BOLLARDS



Contents

Introduction	03
Health & Safety Information	04
Materials & Processes	05
Cleaning, Maintenance & Repair Guidelines	07



Introduction

Speedy Street Solutions bollards are manufactured to proven designs that have been refined through years of development, installation, and real-world use. Our products are engineered to provide reliable performance, durability, and long service life across a wide range of environments.

Bollards can be supplied in a variety of base materials to suit different installation requirements and site conditions. These options allow our products to be used effectively in public spaces, commercial developments, highways, car parks, and private premises.

To help ensure the maximum lifespan of each product, while reducing the need for costly refurbishment or replacement, this guide has been developed to support ongoing maintenance and highlight key considerations that should always be followed during installation and use.

Speedy Street Solutions operates to high standards of quality, environmental responsibility, and health and safety across the design, manufacture, processing, and delivery of our products. Our processes take into account product durability, environmental impact, and the safety of both installers and end users.

Relevant British and international standards considered during product design and manufacture include:

- **BS EN ISO 1461:2009** – Hot dip galvanised coatings on fabricated iron and steel articles
- **BS EN ISO 13920:1997** – Welding tolerances for shapes, dimensions, and lengths
- **BS EN 206-1:2000** – Concrete specification, performance, production, and conformity

Timber bollards are available in a range of hardwood and softwood options to suit different applications and aesthetic requirements.

Where specified, timber can be supplied from **FSC-certified sources**, ensuring the material originates from legal and sustainably managed forests with full chain-of-custody verification.

To prevent timber from sweating and becoming discoloured during storage, any protective wrapping should be removed within **72 hours of delivery**.



Health & Safety Information

Health & Safety Guidance

The majority of bollards supplied by Speedy Street Solutions do not require specific operating instructions once installed. However, important health and safety considerations must always be followed during handling, installation, and ongoing maintenance to ensure safe use.

Key safety points include:

Heavy Materials and Manual Handling

Products manufactured from materials such as cast iron, ductile iron, or concrete are often heavy. Product specifications typically indicate approximate weights for each item. Due to their weight, these products should not be moved or handled by a single person. Where reasonably practical, suitable mechanical lifting equipment should be used for items weighing more than **20kg**. Appropriate **personal protective equipment (PPE)**, including safety footwear, should also be worn during handling and installation.

Maintenance Safety Responsibilities

When carrying out routine maintenance or repairs, customers and contractors must follow all relevant health and safety procedures for the materials, tools, and products being used. It is the responsibility of the customer or installer to ensure that correct operating procedures, safe working practices, and appropriate training are followed at all times.

Speedy Street Solutions cannot accept responsibility for damage, injury, or loss resulting from failure to follow safe working practices or incorrect handling of products.

Telescopic Bollards

Telescopic & Driveway bollards are an exception to standard fixed bollards, as they require operation during normal use. When raising or lowering a telescopic bollard, proper manual handling techniques should always be followed. This includes keeping the **back straight**, bending the **knees**, and lifting using the legs rather than the back to reduce the risk of injury.

Some telescopic bollard models are available with **lift-assist mechanisms**, such as integrated gas struts. These systems can reduce the lifting weight by approximately **75%**, making operation easier and significantly lowering the risk of strain or injury during use.

Handling Concrete Products

When handling concrete bollards or concrete-based street furniture, **protective gloves should always be worn**. This helps prevent abrasions and reduces the risk of skin contact with concrete dust.

Concrete dust may cause **skin irritation**. If contact occurs, the affected area should be washed immediately with **soap and clean water**.



Materials & Processes

Speedy Street Solutions bollards are designed to meet a wide range of customer requirements and site conditions. Depending on the specific product and application, a variety of materials and manufacturing processes may be used during production.

The following materials may be incorporated into the design and manufacture of our bollards:

Materials

- **Mild Steel** – Grade S235
- **Stainless Steel** – Grade 304 or Grade 316 for enhanced corrosion resistance
- **Cast Iron**
- **Ductile Iron**
- **Timber** – Available in a range of hardwoods and softwoods, including FSC-certified options
- **Recycled Plastic** – Durable and low-maintenance material suitable for outdoor environments
- **Concrete** – Available with either exposed aggregate or smooth finishes

Additional Components and Features

- **Nightglow (Phosphorescent) Material** – Glow-in-the-dark elements designed to improve visibility in low-light conditions
- **Lift-Assist Mechanisms** – Gas strut systems fitted to certain telescopic bollards to reduce lifting effort and improve ease of operation
- **Proprietary Locking Systems** – Secure locking mechanisms used within telescopic bollard designs
- **Base Plate Fixings** – Fixing systems used for surface-mounted bollards
- **Illuminated Bollard Fixings** – Ground anchors or J-bolts used for secure installation
- **Reflective Tape** – Class 1 and Class 2 reflective materials used to improve bollard visibility

These materials and components are selected to ensure durability, safety, and suitability for a wide range of environments, including public spaces, commercial developments, highways, and private premises.

Manufacturing Processes

Speedy Street Solutions bollards are produced using a range of established manufacturing processes to ensure strength, durability, and consistent quality across all product types. The processes used will depend on the materials selected and the specific design of each bollard.

The following manufacturing methods may be used during production:

Metal Fabrication

- Bending, forming, fabrication, and welding of steel components to create strong and reliable bollard structures.

Casting

- Casting processes used for **iron and concrete** components, enabling the production of robust bollards with consistent shapes and finishes.



Surface Protection and Finishing

- **Hot dip galvanising (zinc coating)** to provide long-term corrosion protection for steel products.
- **Polyester powder coating** applied to galvanised mild steel products for additional durability and colour finishing.
- **Wet painting** used on cast iron, ductile iron, and polyurethane components where appropriate.
- **Stainless steel polishing** to achieve a high-quality, corrosion-resistant finish.

Moulding Processes

- **Polyurethane (PU) moulding** for durable bollard components and protective finishes.
- **Recycled plastic moulding** used to create sustainable and low-maintenance bollard designs.

Timber Processing

- Precision **woodworking** to shape timber bollards.
- **Timber staining** to enhance appearance and provide protection against weathering.

Product Assembly and Finishing

- Application of **reflective tape** to improve visibility in low-light environments.
- **Assembly of telescopic bollards**, including the installation of locking systems and lift-assist mechanisms where specified.

These processes ensure Speedy Street Solutions bollards meet the required standards for durability, safety, and long-term performance in a variety of public, commercial, and private environments.



Cleaning, Maintenance & Repair

This section provides a general overview of recommended **inspection and cleaning procedures** to help maintain the appearance and performance of Speedy Street Solutions bollards.

To maximise product lifespan, bollards should be **visually inspected on a regular basis**.

Inspections should check for: Signs of damage or vandalism, Deterioration of surface finishes, Build-up of salt, dirt, or atmospheric residue, Loose or damaged fixings

If any issues are identified during inspection, appropriate maintenance or repair procedures should be carried out in line with the material and product type.

In cases where **significant damage occurs to a main component**, customers should contact **Speedy Street Solutions** for further technical guidance and support.

Alongside regular inspections, a **planned cleaning regime** should be implemented to maintain both the appearance and longevity of the product.

The recommended frequency of inspection and cleaning will depend on the **environmental conditions** in which the bollards are installed:

Rural and Urban Environments (C1 – C3)

- Visual inspection: **Monthly**
- Cleaning: **Every 3 months**

Industrial or Coastal Environments (C4, C5-I, C5-M)

Where products may be exposed to higher levels of atmospheric pollutants such as chemicals or marine salt: Visual inspection: **Weekly**, Cleaning: **Monthly**, or more frequently if required

Maintenance Records

All inspection, cleaning, and maintenance activities should be **recorded and documented**. Records should include: Date of inspection or cleaning, cleaning methods used, Products or cleaning agents applied, Details of any repair or maintenance work undertaken

Maintaining accurate records helps ensure proper product care and provides useful documentation should technical support or warranty enquiries arise.

Additional Guidance

This document provides **general guidance** for typical cleaning and maintenance scenarios. If a particular situation falls outside the scope of these recommendations, customers are encouraged to contact **Speedy Street Solutions** for further advice on maintaining the appearance and performance of their bollards.



Galvanised Coating

The galvanised bollard coatings used on Speedy Street Solutions bollards are applied in accordance with **BS EN ISO 1461:2009**, the recognised standard for hot dip galvanised coatings on fabricated steel products.

Galvanising is a process in which steel components are immersed in **molten zinc**, creating a protective coating through a chemical reaction between the zinc and the steel substrate. This coating provides long-term corrosion protection for outdoor environments.

Immediately after the galvanising process, the finish typically appears **bright and shiny silver**. Over time, usually within a few weeks of exposure to the atmosphere, the surface naturally weathers to a **duller grey appearance**. This change is normal and forms part of the protective characteristics of the galvanised coating.

Due to the nature of the galvanising process, **minor surface irregularities** may occasionally be visible on finished products. Where possible, these may be smoothed during finishing; however, this will not be undertaken if doing so could compromise the integrity of the zinc coating. As a result, some visual variations may remain on galvanised surfaces, including on products that are subsequently finished with **polyester powder coating**. These do **not affect the durability, corrosion protection, or performance** of the coating.

Exposed galvanised surfaces should be cleaned using gentle methods to preserve the protective coating.

Recommended cleaning methods include: **Low-pressure water washing**, such as using a hose pipe **Warm soapy water with a soft brush** to remove surface dirt or deposits

Cleaning materials such as **scourers, wire brushes, or abrasive cleaning products must not be used**, as these may damage the protective coating and lead to premature corrosion.

After cleaning, the surface should be **thoroughly rinsed with clean water** to remove any remaining cleaning solution.

Repair of Damaged Galvanising

Galvanised coatings have a limited ability to **self-heal minor scratches or small surface marks** due to the sacrificial properties of zinc. However, if damage extends through the coating to the base steel, a repair should be carried out to restore corrosion protection.

When repairing damaged areas: Inspect the damaged section to determine whether **rust has formed**. If rust is present, the affected area should be **cleaned back to bright steel** using suitable sanding or light abrasion. Apply an appropriate **zinc-rich repair coating** following the manufacturer's instructions. The repaired coating should be applied to achieve a **minimum thickness of approximately 100 microns**, ensuring adequate long-term protection.

Always follow the **manufacturer's health and safety guidance and application instructions** when using repair coatings.

Regular inspection and prompt repair of damaged areas will help maintain the protective performance and appearance of galvanised bollards over time.



Powder Coating

Polyester powder coating is applied to galvanised steel surfaces to provide an attractive, durable, and long-lasting protective finish. The process involves applying a **polyester powder** to the galvanised substrate using an **electrostatic spray gun**. The coated component is then **oven cured**, allowing the powder to bond to the surface and form a tough, hard-wearing outer layer.

Due to the nature of the galvanising process, **minor surface irregularities** may occasionally be visible on finished products. Where possible, these may be smoothed during finishing; however, this will not be undertaken if it risks compromising the zinc coating. As a result, some visual variations may remain on galvanised or powder coated surfaces. These do **not affect the durability or protective performance** of the product.

Durability and Maintenance

Powder coated finishes are designed to provide **long-term performance in outdoor environments**. However, their lifespan will depend on factors such as:

- Installation location
- Environmental conditions
- Exposure to pollutants or coastal environments
- Frequency of cleaning and maintenance

Regular cleaning helps preserve the appearance and protective qualities of the coating.

Cleaning Powder Coated Surfaces

Powder coated surfaces should be cleaned using gentle methods such as:

- **Warm mild soapy water** with a soft brush, sponge, or natural bristle brush, followed by rinsing with clean water
- A **proprietary car wash and wax cleaning system**, followed by rinsing with clean water

During cleaning, **abrasive cleaners, solvents, or harsh chemicals must not be used**, as these may damage the coating.

To help maintain the appearance of the finish, an **annual application of automotive wax** may be used. While this can enhance the appearance and protection of the coating, it is **not essential for normal maintenance**.

Graffiti Removal

If graffiti occurs on a powder coated surface, **solvent-based cleaners should not be used**, as they may damage the coating. Instead, removal should be attempted using:

- A **car cutting compound (such as T-Cut)**, or
- A **specialist graffiti removal product**

Any cleaning product should first be **tested on a small, inconspicuous area** to confirm that it does not affect the finish.

Minor Repairs



Small areas of damage such as scratches or chips can often be repaired to restore protection and appearance.

Where the base metal is exposed:

1. Carefully clean the damaged area.
2. Apply a **zinc-rich primer** to protect the exposed steel.
3. Apply a **matching acrylic-based touch-up paint** to restore the surface finish.

Where only the galvanised layer is exposed:

- Apply a **matching topcoat touch-up paint** without the need for a zinc primer.

Major Damage

For **larger areas of coating damage, vandalism, or surface breakdown**, customers should contact **Speedy Street Solutions** for further technical guidance and advice on appropriate repair method

Wet Painting

Wet painting involves applying a **liquid paint coating** directly onto the base substrate, such as **cast iron, ductile iron, or polyurethane (PU)**. Once applied, the coating cures to form a durable outer layer that provides both protection and an attractive finish.

Wet painted finishes are designed to offer long-term performance; however, their lifespan will depend on several factors including **site location, environmental exposure, atmospheric conditions, and the cleaning and maintenance regime** applied.

The recommended inspection and cleaning frequencies are outlined earlier in this guide.

Cleaning Wet Painted Surfaces

Wet painted surfaces should be cleaned using gentle methods that will not damage the protective coating. Suitable cleaning methods include:

- **Warm mild soapy water** with a soft brush, sponge, or natural bristle brush, followed by rinsing with clean water
- A **proprietary car wash and wax cleaning system**, followed by rinsing with clean water
- **Low-pressure water washing**, such as with a hosepipe

Abrasive cleaners, solvents, or harsh chemicals must not be used, as these can damage the painted surface and reduce the protective qualities of the coating.

Minor Surface Repairs

Small scratches or chips can often be repaired to restore both the appearance and protection of the painted finish.

Where **base material is exposed**, the following steps are recommended:

1. Clean the damaged area thoroughly.
2. Apply a suitable **primer or protective coating** to the exposed surface.
3. Apply a **matching acrylic-based topcoat or touch-up paint** to restore the finish.



If required, the damaged area may be **filled to match the surrounding surface level**. A proprietary automotive-style filler can be used and then sanded smooth before applying primer and topcoat.

Larger Repairs

For larger areas of coating damage or vandalism:

- Lightly **sand the damaged area** to feather the edges of the surrounding coating.
- Apply filler if necessary to restore the original surface profile.
- Apply a suitable **primer followed by a matching topcoat**, either by brush or spray.

Where extensive repairs are required, customers should contact **Speedy Street Solutions** for further technical guidance.

Stainless Steel Surfaces

Stainless steel is commonly used where **corrosion resistance, structural strength, and a clean, modern appearance** are required.

To maintain the appearance and performance of stainless steel bollard, products, **surface contamination and deposits should be prevented**. These deposits may include small particles of iron or rust transferred from other sources during installation or from surrounding environments.

Industrial pollution, airborne contaminants, and natural environmental conditions can also cause deposits that may lead to staining or corrosion if not removed through routine cleaning.

In **more aggressive environments**, such as hot and humid locations or areas with high levels of chlorine or chemical exposure (for example, swimming pool environments), discolouration may occur more rapidly. In these cases, **more frequent inspection and cleaning may be required**. Although stainless steel is highly resistant to corrosion, **all grades and finishes may experience staining, discolouration, or surface deposits during normal service**. To maintain maximum corrosion resistance and preserve the appearance of stainless-steel bollards, the surface should be kept clean and free from contaminants.

When the **correct grade of stainless steel is specified**, and contamination from handling, manufacturing, or installation is removed, combined with regular cleaning and maintenance, stainless steel products will provide **excellent durability and long service life**.

Stainless Steel Grades

Speedy Street Solutions bollards may be manufactured using two commonly specified grades of stainless steel:

Grade 316 (1.4401)

This grade contains higher levels of **chromium and nickel** than grade 304 and also includes **molybdenum**, which significantly improves corrosion resistance. Grade 316 offers greater protection against **surface pitting and staining**, making it particularly suitable for **external environments and coastal or marine locations** where sodium chloride levels in the air are high.

Grade 304 (1.4301)

Grade 304 stainless steel is suitable for **rural and urban environments** where the risk of salt contamination is lower. It provides excellent corrosion resistance in most typical outdoor applications.



Cleaning Frequency

A simple guideline for stainless steel maintenance is:

“Clean the metal when it becomes dirty in order to restore its original appearance.”

For external applications, this may typically range from **one to four times per year**, depending on the environment.

Because of the chemical differences between the two grades, recommended maintenance frequencies vary slightly.

Location	Grade 304 (1.4301)	Grade 316 (1.4401)
Internal	Clean as required to maintain appearance	Clean as required to maintain appearance
Suburban or Rural	Every 6–12 months (depending on location and exposure)	Every 6–12 months
Industrial or Urban	Every 3–6 months	Every 6–12 months
Coastal or Marine	Not recommended	Every 3–6 months

Routine Cleaning

Stainless steel is generally easy to clean. For most situations, the following method is sufficient:

- Wash with **soap or a mild detergent and water**
- Rinse thoroughly with **clean water**
- Dry with a clean cloth if required to enhance the surface appearance

Drying the surface after cleaning can help maintain a **brighter and more consistent finish**.

Cleaning Brushed (Satin) Finishes

For brushed or satin stainless-steel finishes, **nylon abrasive pads** may be used to remove minor scratches, embedded dirt, or surface marks.

When using these pads:

- Always work **in the same direction as the original polishing grain**
- Avoid circular or cross-directional movements that may damage the finish

Removing Stubborn Dirt and Contamination

If stainless steel surfaces become heavily soiled or discoloured due to neglect or environmental contamination, stronger cleaning methods may be required.

Problem	Cleaning Agent	Comments
Routine cleaning	Soap or mild detergent (e.g. washing-up liquid) and water	Apply with sponge, rinse with clean water, wipe dry if required
Fingerprints	Soap and warm water or organic solvent (e.g. acetone or alcohol)	Rinse with clean water and dry



Problem	Cleaning Agent	Comments
Stubborn stains or discolouration	Mild non-abrasive cleaning creams	Rinse thoroughly and dry
Oil or grease marks	Organic solvents such as acetone or alcohol	After cleaning, wash with soap and water and dry
Localised rust spots	Proprietary stainless steel cleaning gels or mild acid solutions	Apply carefully, allow to react, then rinse thoroughly with water. Follow safety guidance when using acid-based cleaners
Mortar or cement splashes	Mild acid-based cleaning solution	Rinse thoroughly with water and dry
Heavily neglected surfaces	Fine abrasive paste (such as automotive polishing compound)	May brighten dull surfaces. For consistent results the entire surface may need treatment
Paint or graffiti	Appropriate alkaline or solvent-based paint remover	Use a soft nylon or bristle brush and follow manufacturer's instructions

Safety and Precautions

When using **specialist cleaning agents or chemical cleaners**, always follow the manufacturer's safety instructions and appropriate handling procedures.

Regular inspection and cleaning will help maintain the **appearance, corrosion resistance, and long-term performance** of stainless-steel bollards.

The cleaning products referenced in the previous guidance are widely recognised as suitable for use on stainless steel surfaces. However, their inclusion is intended only as an example of commonly used solutions. **No endorsement of specific products or manufacturers is implied**, and it is acknowledged that other products from alternative suppliers may provide **equal or superior performance**.

If the recommended cleaning methods outlined in this guidance do not successfully restore the appearance of the stainless-steel surface, **specialist treatment may be required**. In such cases, stainless steel can often be **passivated or mechanically polished by qualified specialists on site**. These processes can help remove contamination, restore the protective surface layer, and improve the overall finish of the material.

Timber

Timber bollards supplied by Speedy Street Solutions are typically manufactured from **durable hardwood species** and are supplied in a **planned and sanded finish**. Timber provides a natural appearance that blends well with parks, pathways, rural locations, and informal public spaces.

To maximise the lifespan of timber bollards and maintain their appearance, **basic maintenance and routine inspections** are recommended.

Routine Inspection and Maintenance

Timber bollards should be **visually inspected at least once per year**. During inspection:

- Check for **splinters, rough edges, or raised grain** on the surface of the wood.
- Any minor splinters or sharp edges should be **lightly sanded** to maintain a smooth and safe finish.

Regular inspection will help ensure that the bollards remain safe, functional, and visually appealing.



Replacement of Timber Bollards

If a timber bollard begins to deteriorate to the point where its **structural integrity or appearance can no longer be maintained**, it should be replaced with a **like-for-like product**.

When replacing timber bollards, it is important to note that **new timber will often appear lighter in colour than existing installations**. This difference occurs naturally due to the **weathering and ageing of timber over time**. The new bollard will gradually blend in as it weathers.

Natural Characteristics of Timber

Timber is a **natural material**, and as such it may naturally **expand, contract, surface check, or develop small splits** as it responds to changes in moisture, temperature, and environmental conditions.

These characteristics are a **normal feature of timber products** and are not considered defects. In many outdoor environments, particularly parks, rural settings, and natural landscapes, these natural variations contribute to the **authentic and informal appearance** of timber street furniture.

Concrete Bollards

Precast concrete bollards require **minimal maintenance** in normal service conditions. Over time, the surface may naturally accumulate dirt or environmental staining, which is typical for outdoor concrete products.

If the bollards become excessively soiled, they can be cleaned using the following method:

- Use a **scrubbing or sweeping brush** with a **mild detergent and water solution**.
- After cleaning, **rinse thoroughly with clean running water**.

Important: Before cleaning, ensure that any **surrounding masonry or concrete surfaces are thoroughly soaked with clean water**. This helps prevent dirty wash water from being absorbed into surrounding materials and causing staining.

Polyurethane (PU) Bollards

Polyurethane bollards are **pigmented throughout the material** and are available in a range of **BS or RAL colour finishes**. These bollards are typically finished with a **wet sprayed primer undercoat and a two-pack acrylic topcoat**, similar to the finishing system used on cast iron products.

For cleaning and maintenance, the **same guidelines outlined for wet painted finishes** should be followed to maintain the appearance and durability of the coating.

Recycled Plastic Bollards

Recycled plastic bollards are manufactured from **mixed post-consumer recycled materials** and are coloured throughout, most commonly in **black**. These bollards are highly durable and require only **occasional cleaning** to maintain their appearance.

The recommended inspection and cleaning frequency depends on the environment in which the product is installed:



Rural and Urban Environments (C1 – C3)

- Visual inspection: **Monthly**
- Cleaning: **Every 3 months**

Industrial or Coastal Environments (C4, C5-I, C5-M)

Where products may be exposed to higher levels of atmospheric pollutants such as chemicals or marine salt:

- Visual inspection: **Weekly**
- Cleaning: **Monthly**, or as required

Cleaning should be carried out using a **mild detergent and warm water** solution. Once cleaned, the bollards should be **thoroughly rinsed with clean running water**.

Reflective Banding

Reflective banding fitted to bollards should be **regularly inspected and cleaned** to maintain maximum visibility and performance. It is recommended that the banding is **checked and cleaned at least every three months**.

If the reflective tape becomes **damaged, worn, or detached**, it should be **removed and replaced with new reflective banding** to ensure continued effectiveness. Replacement reflective tape is widely available and can be applied to restore visibility where required.



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[Speedy Street Solutions Brochure 2022](#)



We are specialists in the design and manufacture of street furniture.

Our extensive street furniture range includes: Bollards-barriers-Anti Ram-Removable-Telescopic- Shelters- Cycle Stands-Seating- Benches- Planters-Bins- Speed Bumps and lots more.

