OPERATION & MAINTENANCE MANUAL

LITTER BINS & RECYCLING BINS

Contents

Introduction

Speedy Street Solutions litter bins and recycling units are manufactured using designs that have been refined through years of development and real-world installation. These proven designs ensure durable, practical waste management solutions suitable for a wide range of public and commercial environments.

Our litter bins and recycling units are available in a variety of base materials, allowing them to be specified to suit different locations, environmental conditions, and project requirements.

To help maximise the lifespan of each product and reduce the need for costly refurbishment, this guide has been produced to outline recommended maintenance procedures and highlight important handling and usage considerations that should always be followed.

Speedy Street Solutions is committed to providing high-quality products that consider environmental impact, durability, and the safety of users throughout the product lifecycle. The following standards have been considered during the design, manufacture, and finishing of our products:

- **BS EN ISO 1461:2022** – Hot dip galvanised coatings on fabricated iron and steel articles
- **BS EN ISO 13920:2023** – Welding tolerances for welded constructions including dimensions, shape, and position

Some litter bins are timber-clad or manufactured entirely from timber. Where required, these products can be supplied with **FSC® certified timber** if specified at the time of order. FSC certification ensures the timber has been sourced from responsibly managed forests with full chain of custody, guaranteeing legal and sustainable origins.

To maintain product quality, **all items must be unwrapped within 72 hours of delivery**. Prolonged storage while wrapped may expose the product to trapped moisture and environmental conditions that could cause premature corrosion, staining, discolouration, or the development of mould or mildew.

Speedy Street Solutions cannot accept liability where these instructions are not followed.

Any **damage or missing components must also be reported within 72 hours of delivery acceptance** so that the issue can be resolved promptly.

Health & Safety Information

Most **Speedy Street Solutions litter bins and recycling units** require no specific operating procedures once they have been installed in accordance with the recommended installation guidelines. For additional product information or installation guidance, please refer to the relevant product documentation or contact the Speedy Street Solutions team.

However, certain health and safety considerations should always be observed during installation, maintenance, and use.

Products manufactured from **cast iron, ductile iron, or concrete** can be significantly heavy. Product weights are typically provided within product specifications to assist with safe handling planning. As a general rule, items of substantial weight should **not be moved by a single person**.

Where reasonably practical, **mechanical handling equipment should be used for products weighing over 20 kg**. Appropriate **personal protective equipment (PPE)**, including safety footwear, should also be worn during handling and installation.

When undertaking **routine maintenance**, customers and contractors must ensure that all relevant health and safety procedures are followed for the materials, tools, and maintenance products being used. It is the responsibility of the customer or maintenance team to ensure that:

- Correct operational procedures are followed
- Staff are properly trained
- Work is carried out safely and responsibly at all times

Speedy Street Solutions cannot accept responsibility for any damage to property or injury to individuals resulting from failure to follow safe working practices.

From a health and safety perspective, the primary considerations during the use of litter bins relate to **manual handling during positioning, servicing, or waste removal**.

When **emptying litter bins**, users should also remain aware of potential hazards within the waste, including **sharp objects or liquids** that may have been disposed of in the bin. Appropriate care should always be taken to avoid injury or contamination when removing waste.

Materials & Processes

Speedy Street Solutions litter bins and recycling units are designed to meet a wide range of customer requirements and environmental conditions. Depending on the product specification, various materials and manufacturing processes may be used during production to ensure durability, performance, and longevity in public and commercial environments.

The following materials may be used in the manufacture of Speedy Street Solutions waste and recycling units:

Materials

- **Pre-galvanised sheet steel** – Grade DX51 Z275
- **Mild steel with Zintec coating** – Grade DC01+ZE 25/25
- **Stainless steel** – Grade 304 or 316
- **Cast iron** – Grade 250
- **Ductile iron** – Grade 450-10
- **Aluminium**
- **Timber** – Hardwood and softwood options available (including FSC® certified timber where specified)
- **Plastic components**
- **Concrete**

Additional Components

- Proprietary locking mechanisms
- Fixings and fasteners
- Reflective tape and safety decals

Material selection varies depending on the specific product design, intended location, and performance requirements. Each material is chosen to provide **strength, durability, corrosion resistance, and long service life** in outdoor environments.

Processes Used

During the manufacture of Speedy Street Solutions litter bins and recycling units, a range of modern production and finishing processes may be used to ensure high standards of quality, durability, and consistency.

The processes used may include:

- **Bending, forming, fabrication, and welding** of metal components
- **Laser cutting and punching** of sheet metal

- **Casting processes** for aluminium, iron, and concrete components
- **Zinc galvanising or Zintec coating** to provide corrosion resistance
- **Plastic moulding** for specific product parts and liners
- **Polishing of stainless steel** for a clean, durable finish
- **Polyester powder coating** to provide a robust and weather-resistant surface finish
- **Wet painting** where appropriate for specific finishes
- **Woodworking processes** for timber components
- **Timber staining or treatment** to enhance durability and appearance
- **Application of reflective tape and vinyl logos** for visibility and branding
- **Electro zinc plating of fasteners and fixings** to improve corrosion resistance

These manufacturing processes are carefully selected to ensure each product delivers **long-term performance, structural integrity, and resistance to outdoor environmental conditions**.

Cleaning, Maintenance & Repair

This section provides general guidance on inspection, cleaning, and maintenance procedures designed to preserve the appearance and performance of **Speedy Street Solutions litter bins and recycling units**.

Inspection & Cleaning

To maximise product lifespan, all units 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 fixings or fittings

If any issues are identified during inspection, appropriate maintenance or repair work should be carried out based on the material used in the product.

In addition to routine inspections, **regular cleaning** is essential to maintain both the appearance and performance of the unit.

The **recommended** cleaning, lubrication and maintenance **frequency** depend on the environment where the product is installed:

Rural and Urban Environments:

Visual inspection: **Monthly**, cleaning: **every 3 months**

Harsh Industrial or Coastal Environments

Where products may be exposed to higher levels of atmospheric pollutants (such as chemical emissions or marine environments): Visual inspection: **Weekly**, Cleaning: **Monthly**, or more frequently if required

High Footfall Locations

Bins installed in **busy town centres, high streets, transport hubs, or near fast-food outlets** may require more frequent maintenance. Locations where carbonated drinks and food waste are commonly disposed of should follow the **same inspection and cleaning schedule recommended for harsh environments**.

This document provides general maintenance guidance and may not cover every specific situation. If cleaning or repair requirements fall outside the scope of this guidance, customers are advised to **contact Speedy Street Solutions for further advice and support**.

Maintenance Records

It is recommended that **detailed written records** are kept for all inspections, cleaning, and maintenance activities. Records should include:

- Date of inspection or cleaning
- Cleaning methods used
- Products or chemicals applied
- Details of any repairs carried out

Each record entry should be **signed and dated** for accountability.

Where a **warranty claim** is submitted, Speedy Street Solutions may request copies of these maintenance records.

Powder Coating (Mild steel litterbins, dog waste bins & recycling units)

Powder coating is a finishing process where a **polyester powder is electrostatically applied to the metal surface** and then **oven cured**, creating a durable and hard-wearing protective coating. This finish provides both **corrosion protection and an attractive appearance** on the final product.

Powder coated finishes can last many years; however, their lifespan will depend on several factors, including **site location, environmental conditions, exposure to pollutants, and the regularity of cleaning and maintenance**.

Cleaning Recommendations

The recommended cleaning frequency should follow the inspection and cleaning schedules outlined earlier in this guide.

Powder coated surfaces should be cleaned using one of the following methods:

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

Important: The use of **high-pressure jet washers is not recommended**, as the force of the water may damage or reduce the adhesion of applied reflective tape, decals, or graphics.

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

To maintain and enhance the appearance of the powder coated finish, an **annual treatment with a standard automotive wax** may be applied if desired. This is optional but can help maintain the product's visual appearance.

Graffiti Removal

If graffiti appears on a powder coated surface, **solvent-based cleaners should not be used**, as these may damage the coating.

Instead, removal should be attempted using:

- A **car body 'T-cut' polishing compound**, or
- A **specialist graffiti removal product**

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

Minor Repairs

For **minor scratches or chips**, the following repair process is recommended:

- Where the **base metal is exposed**, carefully apply a **zinc-rich primer** to the damaged area, followed by a **matching acrylic-based topcoat or touch-up paint** supplied or recommended by Speedy Street Solutions.
- Where the **galvanised surface is exposed but the base metal is not**, the same repair method should be followed **without applying the zinc-rich primer**.

Major Damage

Where there are **larger areas of coating damage, vandalism, or significant breakdown of the finish**, customers should contact **Speedy Street Solutions** for technical advice and guidance on appropriate repair or refurbishment options.

Wet Painting (Cast iron litterbins & aluminium dog waste bins)

Wet painting is a finishing process in which **liquid paint is applied directly to the base substrate**, such as **cast iron, ductile iron, or aluminium**. Once applied, the coating cures to form a **durable and protective outer layer**, providing both visual appeal and resistance to environmental conditions.

A wet painted finish can last for many years; however, its lifespan will depend on several factors including **installation location, atmospheric conditions, exposure to pollutants, and the regularity of cleaning and maintenance**.

Cleaning Recommendations

The recommended cleaning frequency should follow the inspection and cleaning schedules outlined earlier in this guide.

Wet painted surfaces should be cleaned using one of the following methods:

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

At no point during cleaning should **abrasive cleaners, solvents, or harsh chemical products** be used, as these may damage the painted surface.

Minor Repairs

For **light scratches or small chips** where the base material is exposed, the following repair method should be used:

- Carefully apply a **suitable primer** to the damaged area
- Follow with a **matching acrylic-based topcoat or touch-up paint** recommended or supplied by Speedy Street Solutions

If necessary, the damaged area may be **filled to restore the original surface level**. A proprietary automotive-style filler can be used for this purpose and can be sanded smooth to match the surrounding painted finish before repainting.

Larger Repairs

For **larger areas of damage, coating breakdown, or vandalism**, the affected area should be:

1. **Lightly sanded** to remove loose paint and feather the edges of the surrounding coating
2. **Filled where required** to restore the surface profile
3. **Primed and repainted** using a suitable primer and matching topcoat, applied either by brush or spray

For further details regarding the **original paint system specification**, customers should contact **Speedy Street Solutions** for technical guidance

Stainless Steel

Stainless steel is commonly selected for street furniture applications due to its **excellent corrosion resistance, strength, and clean aesthetic appearance**. However, while stainless steel is highly resistant to corrosion, it is important to remember that it is **"stain less", not "stain never"**.

Surface contamination and the formation of deposits should be prevented wherever possible. These deposits may include **small iron particles, rust contamination from surrounding materials, or environmental pollutants** that settle on the stainless steel surface after installation. Industrial environments and naturally occurring atmospheric conditions can also contribute to the build-up of corrosive residues.

More aggressive environments, such as **hot and humid locations or areas exposed to chemicals**, can increase the rate of surface discolouration and may require **more frequent cleaning and maintenance**.

All grades and finishes of stainless steel can potentially **stain, discolour, or accumulate grime during normal service**. To maintain maximum corrosion resistance and visual appearance, the stainless-steel surface must be kept clean. When the correct grade is specified, and any contamination from manufacturing, handling, or installation is removed, **regular cleaning will ensure long-term performance and durability**.

Stainless Steel Grades

Speedy Street Solutions products may utilise two common stainless-steel grades:

Grade 316 (1.4401): This grade contains higher levels of chromium and nickel than Grade 304 and also includes molybdenum. These elements significantly improve corrosion resistance, making Grade 316 **less susceptible to surface pitting and staining**. It is particularly suited to **external applications and coastal or marine environments**, where sodium chloride levels in the air are higher.

Grade 304 (1.4301): Grade 304 is typically suitable for **rural and urban environments** where there is less exposure to salt contamination and aggressive atmospheric conditions.

Recommended Cleaning Frequency:

The frequency of cleaning depends on both the **environmental conditions** and the **grade of stainless steel used**. As a general rule, stainless steel should be cleaned whenever it becomes visibly dirty in order to restore its appearance. For most external installations, this may range from **once to four times per year**.

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

Cleaning Methods: Stainless steel is relatively easy to maintain. In most cases, the following method will be sufficient:

- Wash with **warm water and mild soap or detergent**

- Rinse thoroughly with **clean water**
- **Dry the surface** to enhance the final appearance and reduce water marks

Removing Minor Surface Imperfections: For **brushed (satin) stainless steel finishes**, nylon abrasive cleaning pads may be used to remove light scratches, surface marks, or embedded dirt.

These flexible abrasive pads contain fine grit and should **always be used in the same direction as the original polishing marks** to maintain the appearance of the finish.

Where stainless steel surfaces become **heavily soiled, discoloured, or neglected over time**, more thorough cleaning methods may be required to restore their appearance. The following table outlines recommended cleaning solutions for common issues.

Problem	Cleaning Agent	Comments
Routine cleaning	Mild soap or detergent (e.g. washing-up liquid) and water	Apply with a sponge, rinse with clean water, and wipe dry if necessary
Fingerprints	Warm soapy water or organic solvent (e.g. acetone or alcohol)	Rinse with clean water and wipe dry
Stubborn stains or discolouration	Mild non-abrasive cleaning creams or solutions	Rinse thoroughly with clean water and wipe dry
Oil or grease marks	Organic solvents (e.g. acetone or alcohol)	Clean afterwards with soap and water and wipe dry
Localised rust	Proprietary rust-removal gels, 10% phosphoric acid, or oxalic acid solution	Apply using a swab and leave for approximately 15 minutes before rinsing with water. For phosphoric acid treatments, rinse first with an ammonia solution, then clean water. Appropriate safety precautions should always be followed
Mortar or cement splashes	10% phosphoric acid solution (warm)	Rinse first with an ammonia solution, then clean with water and wipe dry
Badly neglected surfaces with heavy deposits	Fine abrasive polishing paste (e.g. automotive polishing compound)	May improve dull finishes. To avoid patchy results, the entire surface may need to be treated
Paint or graffiti	Alkaline or solvent-based paint remover appropriate for the paint type	Apply using a soft nylon or natural bristle brush and follow the manufacturer's instructions

The products referenced above are commonly considered suitable for use on stainless steel surfaces. However, Speedy Street Solutions does not endorse specific brands, and equivalent products from other manufacturers may also be appropriate.

If the cleaning methods described above do not achieve the desired results, stainless steel surfaces can also be **professionally passivated or mechanically polished by specialist contractors** to restore the finish.

Timber Components:

Some Speedy Street Solutions litter bins incorporate **timber cladding or timber structural elements**. These components may include **redwood, plywood bases, or durable hardwood slats such as iroko**, depending on the specific product design.

During manufacture, most timber components are treated with a **protective wood stain or preservative** to enhance durability and maintain appearance.

To maximise the lifespan of timber elements and maintain their aesthetic appearance, **basic periodic maintenance and care will be required**: A visual check should be completed, at least annually, whereby any splinters or sharp edges of wood are lightly sanded to remove them. The wood should be coated with a proprietary wood stain system on an annual basis so as to preserve its appearance and longevity. If the timber starts to deteriorate and its aesthetic value cannot be maintained, then it should be changed for a like for like replacement. Where a replacement is made, then there will be a shading difference against any existing timber that remains, this is due to the weathering effect of wood in service.

Due to the natural properties of timber, it has the tendency to move, surface check or split. This is a feature of timber products and does not look out of place in the informal environments in which these products are used.

Plastic

Plastic litter bins and recycling units are typically manufactured using **recycled plastic granules** and are produced through **injection moulding or rotational moulding processes**. These materials are durable and suitable for outdoor environments but will benefit from **periodic cleaning and inspection** to maintain appearance and performance.

Inspection & Cleaning Frequency: The recommended inspection and cleaning schedule will depend on the environmental conditions where the product is installed.

Rural and Urban Environments

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

Harsh Industrial or Coastal Environments

- Visual inspection: **Weekly**
- Cleaning: **Monthly**, or more frequently if required

These environments may expose the product to **chemical pollutants, marine salt, or other atmospheric contaminants**, which can accelerate surface build-up.

Cleaning Method

Plastic units should be cleaned using:

- **Warm water with a mild detergent**
- A soft cloth, sponge, or soft brush

After cleaning, the bin should be **thoroughly rinsed with clean running water**.

Important: The use of **high-pressure jet washers is not recommended**, as excessive pressure may damage the surface or affect the adhesion of reflective tape and decals.

Reflective Banding & Decals: Reflective banding and decals help improve **visibility and identification**, particularly in public environments or low-light conditions.

To maintain optimum performance:

- Reflective banding should be **inspected regularly for damage**
- Cleaning should take place **at least every 3 months**

If reflective tape or decals show **signs of damage, peeling, or deterioration**, they should be **removed and replaced with new material**.

Cleaning should be carried out using:

- A **sponge with mild detergent and water**

As with the plastic surfaces, **high-pressure jet washing should be avoided**, as this may reduce the adhesion of the tape or decals.

Hinges & Locks

To ensure reliable operation and extend service life, **hinges, latches, and locking mechanisms should be lubricated regularly**.

Recommended Minimum Lubrication Frequency

- **Harsh environments:** Every **3 months**
- **General environments:** Every **6 months**

For **mild steel and stainless-steel bins**, hinges and locks should be lubricated using **copper grease or an equivalent suitable lubricant** to maintain smooth operation and help protect against corrosion.

Speedy Street Solutions would under no circumstances recommend the use of WD40 as a method of maintaining its products.

Locks should be always kept free from trapped litter as this may result in the lock jamming.

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Speedy Street Solutions Brochure 2022

We are specialists in the design and manufacture of street furniturOur extensive street furniture range includes: Bollards-barriers-Anti Ram-Removable- Telescopic- Shelters- Cycle Stands- Seating- Benches- Planters-Bins- Speed Bumps and lots more.