CENTRA

MATERIAL SUBMITTAL

Garbage Chute System

Complete chute system with cleaning, fire protection and controls

MANUFACTURER	Ostermeier FZE, Jebel Ali, Dubai, UAE
MANUFACTURER REF.	JK/OSTS/CENT/MS/Rev.0
REVISION	Rev. 0
DATE	07 / 01 / 2026
SUBMITTED BY	CENTRA | Building Systems Machinery & Equipment Co.

SUBMITTAL INFORMATION

Project & **Team**

Project	
Client / Employer	
Consultant	
Main Contractor	
Submittal No.	
Specification Section	
Product	Garbage Chute System (1 no.)
Manufacturer	Ostermeier FZE, P.O. Box 61378, Jebel Ali, Dubai, UAE
Manufacturer Ref.	JK/OSTS/CENT/MS/Rev.0 (dated 07/01/2026)
Supplier	CENTRA | Building Systems Machinery & Equipment Co., Riyadh

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CONSULTANT'S REVIEW

- ☐ A – Approved
- ☐ B – Approved as noted
- ☐ C – Revise & resubmit
- ☐ D – Rejected

Reviewed by _____

Signature _____

Date _____

CONTENTS

Table of **Contents**

01 Introduction **05**

Project introduction 05

How the chute works 06

02 Specification **08**

03 Technical Details **11**

3.1 Chute Head Plate 11

3.2 Jet Spray 12

3.3 Chute Tube & Sound Dampening 13

3.4 Brushing Device 14

3.5 GI Chute Supporting Frame 15

3.6 Intake Throat 16

3.7 Fire Rated Bottom Hinged Door 17

3.7 Foot Pedal Operation 18

3.8 Glass Bulb Sprinkler 19

3.9 Cleaning System 20

3.9.1 Disinfectant Tank & Solution 21

3.9.3 Solenoid Valve 22

3.10 Master Control Panel 23

04 Appendix A | Technical Sheets **25**

A-3.1 Dimensioned technical sheets, A-3.1 to A-3.9.3 25

A-3.10 Control panel front view and schematic diagrams (manufacturer) 39

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01

PROJECT INTRODUCTION

Material Submittal | Garbage Chute System

01 INTRODUCTION

Project **Introduction**

Ø600 mm	SS 304	730 × 540	68 °C	2 bar
Chute tube diameter	1.5 mm stainless steel	Intake door architrave (mm)	Sprinkler activation	Jet spray line pressure

This project consists of 1 no. garbage chute system installed running from the ground floor to the last typical floor, with the exhaust system extending to the top of the roof.

The garbage chute is 600 mm in diameter and the thickness of the section is 1.5 mm. The external surface of the garbage chute tubes is coated with sound dampening compound so as to absorb any unwanted noise from falling garbage inside the chute.

The system consists of intake doors through which the garbage is deposited into the chute. The door has a self-locking electromagnetic interlocking mechanism which allows only one door to open at a time and locks all doors during cleaning and maintenance. Pilot lamps on each intake door indicate the status of the door, whether it is locked or unlocked.

The garbage deposited from each typical floor is received by the trolley located on the ground floor.

The garbage chute is adequately ventilated by an exhaust fan installed at roof level; this fan extracts any unpleasant smell from the chute to the atmosphere.

The master control panel located on the ground floor controls the operation of the cleaning system, the intake doors and the exhaust fan.

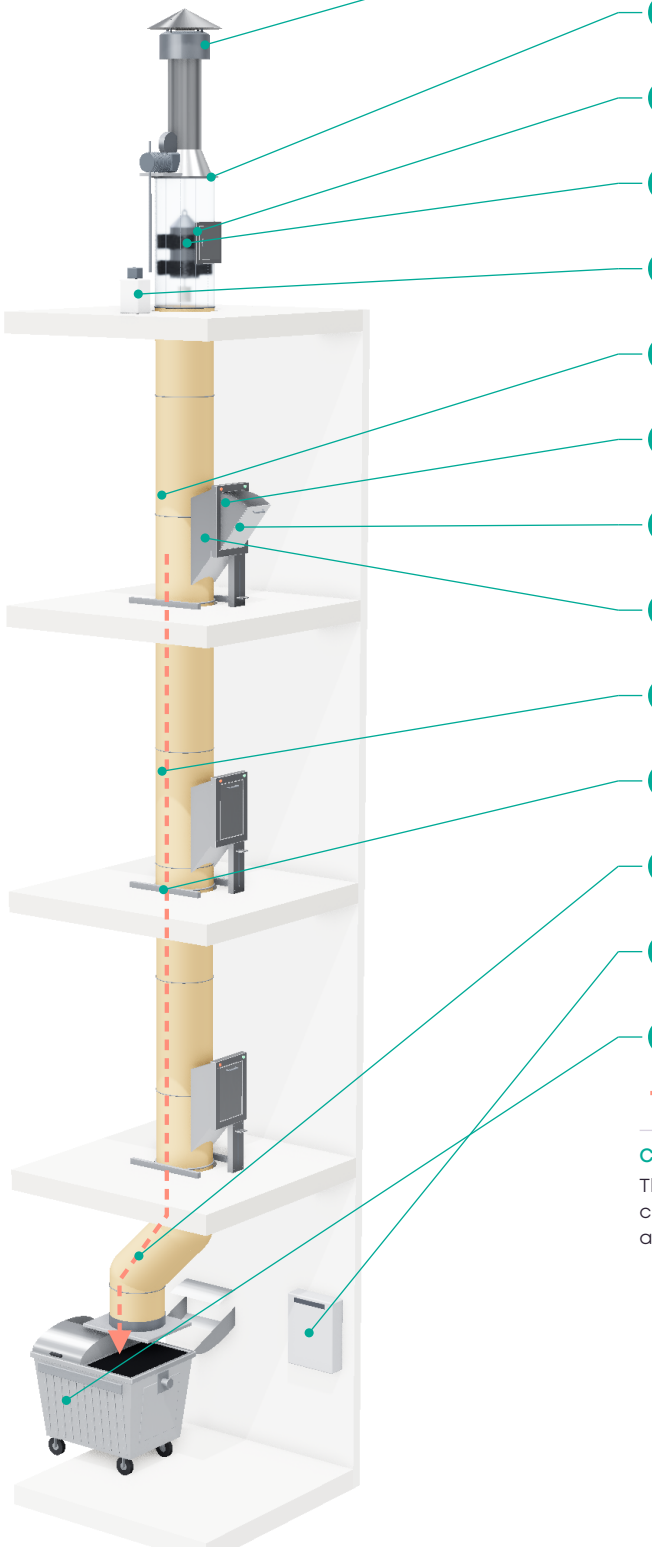
INTERFACE BY OTHERS

Water supply pipework from the roof tank to the chute head and jet sprays, and the final connection, are by the main contractor. The sprinkler feed from the fire fighting riser is by others.

SYSTEM OVERVIEW

How the chute **works**

Waste dropped through any intake door falls by gravity down the Ø600 mm chute, through the offset, into the collection container.



Illustrative 3D view; three typical floors shown.

1. **Exhaust fan**
   Roof level; extracts odour from the chute
2. **Chute head plate & vent**
   SS 304 plate with Ø340 mm vent neck
3. **Access door**
   Top section; service access to the brush
4. **Brushing device**
   Nylon brush parked in the top section, motor lowered
5. **Cleaning system**
   Disinfectant tank and solenoid valve
6. **Jet spray**
   Brass, ½" connection, 2 bar, at every intake
7. **Glass bulb sprinkler**
   Pendent, ½", activates at 68 °C
8. **Fire rated intake door**
   Bottom hinged, interlocked, pilot lamps
9. **Intake throat**
   SS 304, slopes down into the chute
10. **Chute tube**
    Ø600 mm, SS 304, 1.5 mm, sound dampened
11. **GI supporting frame**
    At every slab opening
12. **Chute offset**
    Two 45° bends above the discharge room
13. **Master control panel**
    Ground floor; controls doors, cleaning and fan
14. **Collection container**
    1.1 m³ steel container, DIN 30700, ground floor

Waste path: by gravity, from every floor to the container

CONTAINER OPTIONS

The 1.1 m³ steel container is shown in the room. The client can choose the container that best suits the application, waste volume and room access, for example:



Round stainless steel



HDPE 1100 L, colours



HDPE 360 L, two-wheel

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02

SYSTEM SPECIFICATION

Material Submittal | Garbage Chute System

02 SPECIFICATION

System **Specification**

ITEM	DESCRIPTION	CONSULTANT COMMENTS
Chute Head Plate	The chute head plate is supplied with all necessary connections and holes for the flushing spray head and air vent. The plate can also be removed for maintenance of the chute system.	
Jet Spray	Used to clean the inside of the chute on every floor. It consists of a sprinkler-type cleaning system fitted with a very powerful cleaning jet spray on top of the chute head plate and on top of all intakes on each floor. **Note:** The water supply connection pipes are to be provided by the main contractor from the roof tank and are not included in our scope.	
Chute Tube	Ø600 mm tube fabricated from 1.5 mm thick stainless steel (Grade 304) sheets, completely coated on the outside for its entire length with sound dampening material. **Note:** Chute tube will be provided according to the actual height of the building.	
Brushing Device	Designed to clean the chute tube over its full length. It sits in the top section of the chute behind an access door, and comprises a cylindrical holder with detachable, very stiff nylon brushes, lowered and returned by an electric geared motor.	
GI Chute Supporting Frames & Clamp Rings	Provided to support the chute tube at the slab openings accordingly.	
Intake Throat	Stainless steel (Grade 304) intake throats, designed to suit the bottom-hinged intake doors.	

02 SPECIFICATION

System **Specification (cont.)**

ITEM	DESCRIPTION	CONSULTANT COMMENTS
Fire Rated Bottom Hinged Door	730 (H) × 540 (W) mm architrave with door panel dimension 580 (H) × 390 (W) mm, stainless steel (Grade 304), noiseless, self-sealing, self-closing and hand-operated, with door interlocking device which operates one door at a time. Fire rating: **To be confirmed**.	
Glass Bulb Sprinklers	Used for fire protection inside the chute, provided on every floor. Glass bulb sprinkler R-½" connector thread type, pendent type, actuating temperature 68 °C. Pendent fire sprinklers can be used in conjunction with normal water supply.	
Cleaning System – Disinfecting & Sanitizing Apparatus	Fitted with a solenoid valve connected on top of the chute head for cleaning the chute system; the disinfectant mixes with the flushing water at the time of washing. **Note:** Water supply pipe to the chute head and connection by main contractor; not included in our scope.	
Master Control Panel	Provided with the necessary switches, relays, lights etc. for the control of the chute system.	

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03

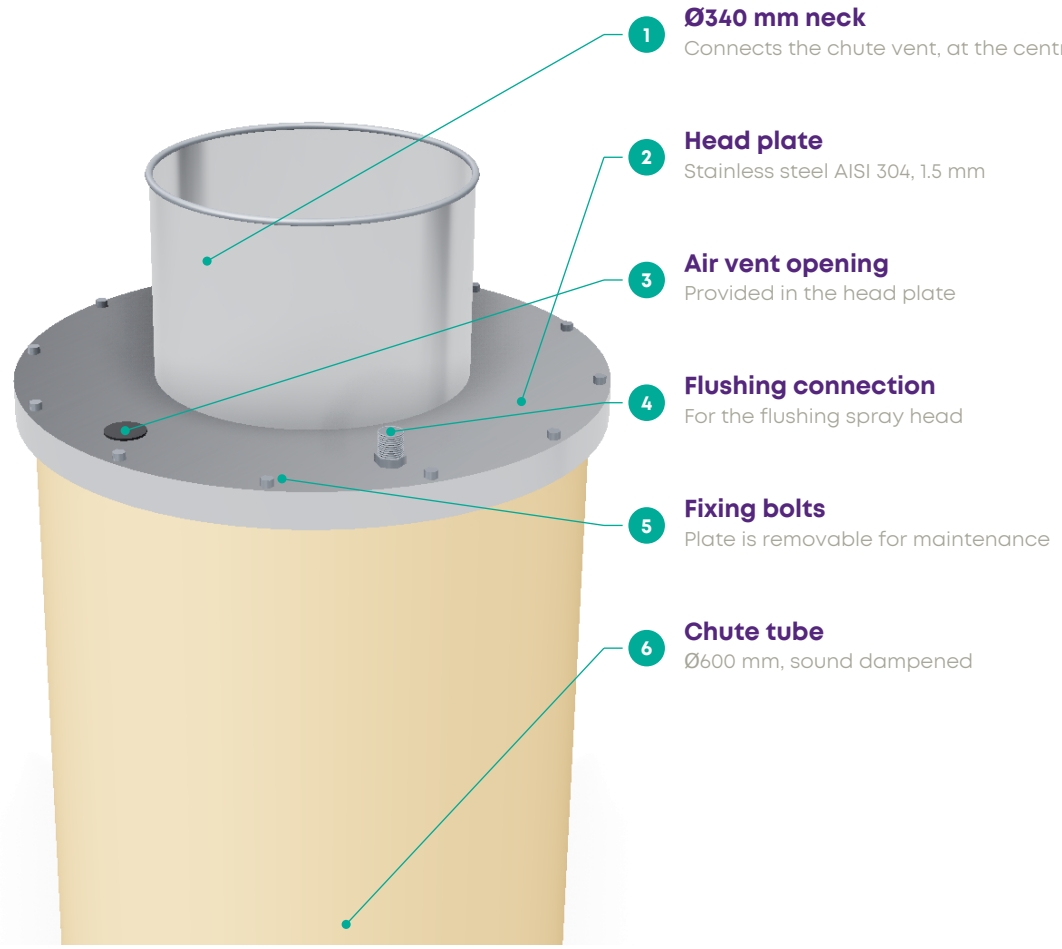
TECHNICAL DETAILS

Material Submittal | Garbage Chute System

3.1 CHUTE HEAD PLATE

Chute Head **Plate**

The head plate closes the top of the chute. A Ø340 mm neck at the centre connects the chute vent, and holes are provided for the flushing system and air vent. The plate can be removed for maintenance of the chute system.



TECHNICAL DATA

Material	Stainless steel
Grade	AISI 304
Thickness	1.5 mm
Diameter	To suit Ø600 mm chute tube
Vent neck	Ø340 mm, at the centre

KEY FEATURES

- **Removable**
  The plate can be taken off for maintenance of the chute.
- **Pre-drilled**
  Holes for the flushing spray head and the air vent.

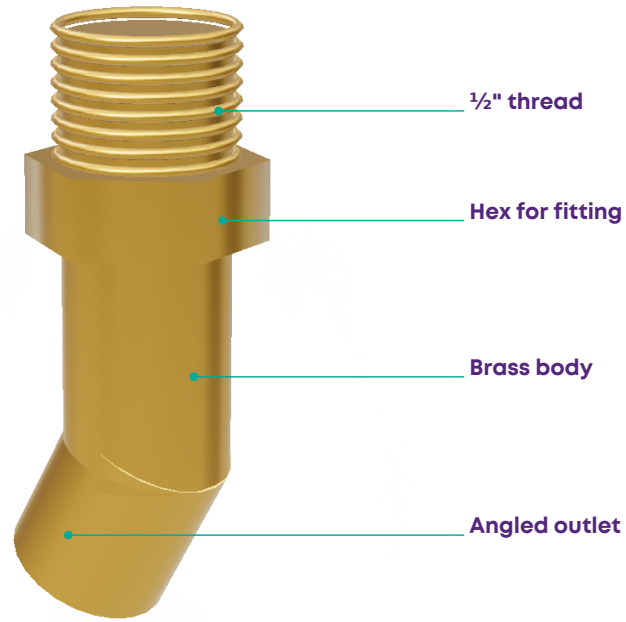
Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.2 JET SPRAY

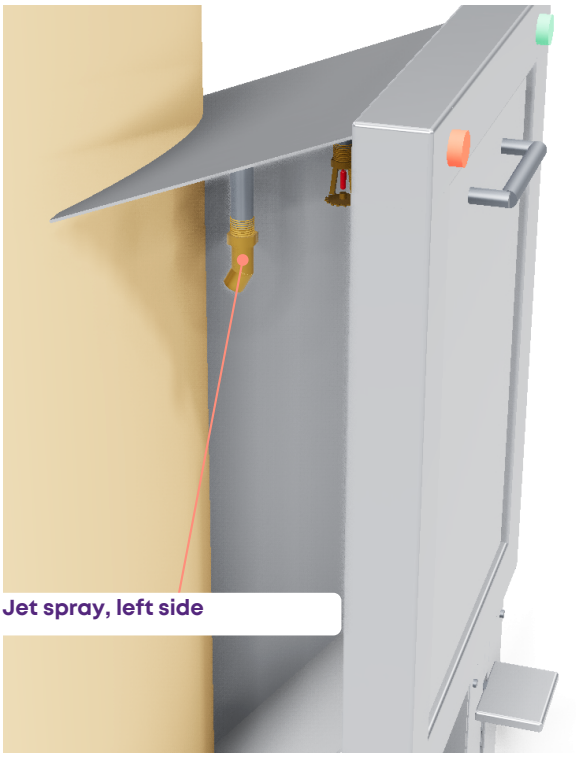
Jet **Spray**

A brass jet spray sits inside the intake throat, on the left side, at every intake door level, with one more on the chute head plate. During the cleaning cycle the water and disinfectant mix is sprayed into the chute from every floor.

THE NOZZLE



LOCATION | THROAT CUT AWAY



TECHNICAL DATA

Material	Brass
Connection	½" thread
Type	Hanger type
Line pressure	2 bar required
Location	Inside intake throat, left side, every floor; one on the head plate

HOW IT WORKS

- **Activated from the panel**
  The cleaning cycle opens the solenoid valve from the main control panel.
- **Mixed solution**
  Water and disinfectant are mixed in proportion and sprayed into the chute.
- **Every floor**
  Sprays from the head plate and from each intake door level.

BY MAIN CONTRACTOR

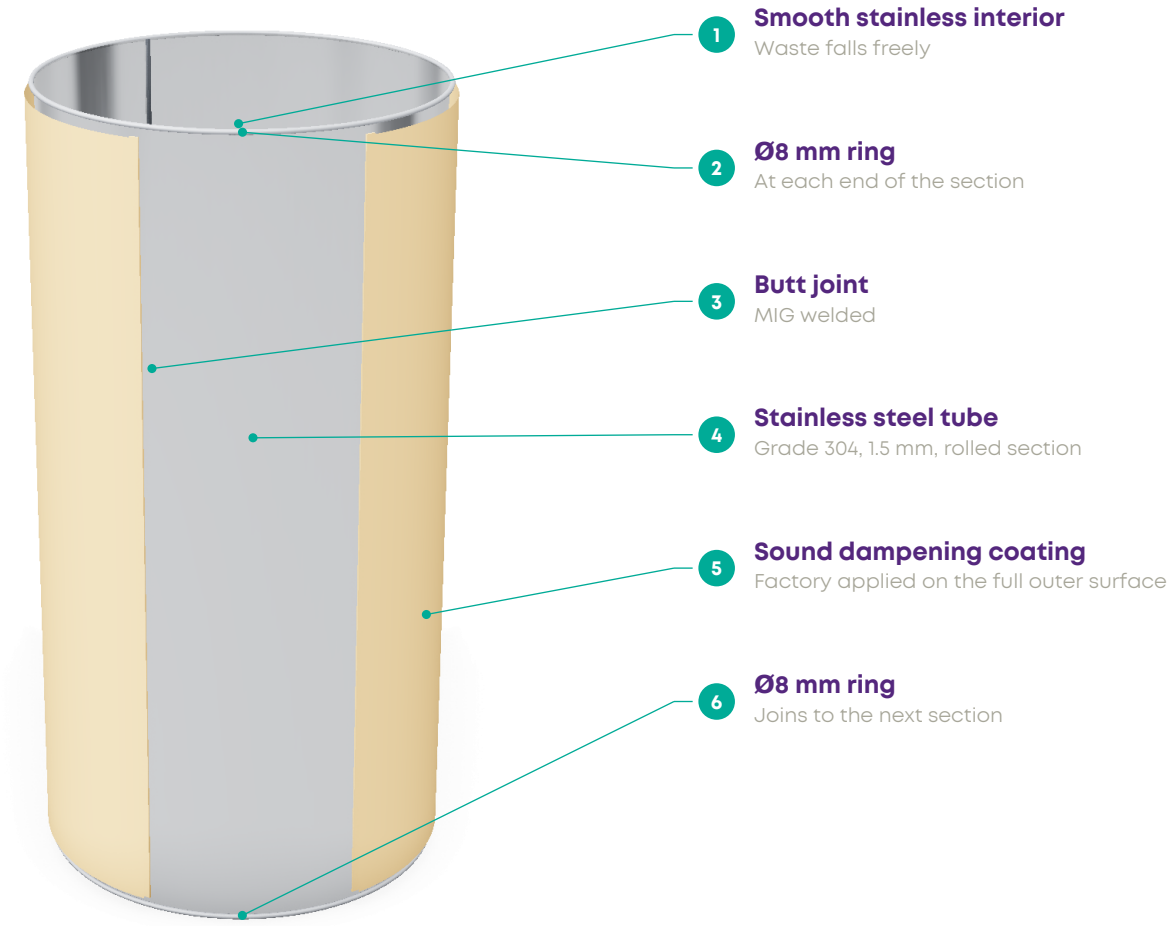
Water supply connection pipes from the roof tank are by the main contractor and are not in our scope.

Illustrative 3D views based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.3 CHUTE TUBE | 3.3.1 SOUND DAMPENING

Chute Tube & **Sound Dampening**

Ø600 mm tube rolled from 1.5 mm stainless steel sheet, butt jointed and MIG welded, with Ø8 mm rings at the ends. The full outside surface is coated in the factory with a sound dampening compound to reduce noise from falling waste.



TECHNICAL DATA

Diameter	600 mm
Material	Stainless steel
Grade	304
Thickness	1.5 mm
Section	Rolled, butt joint, MIG welded
Length	To suit the actual building height

SOUND DAMPENING

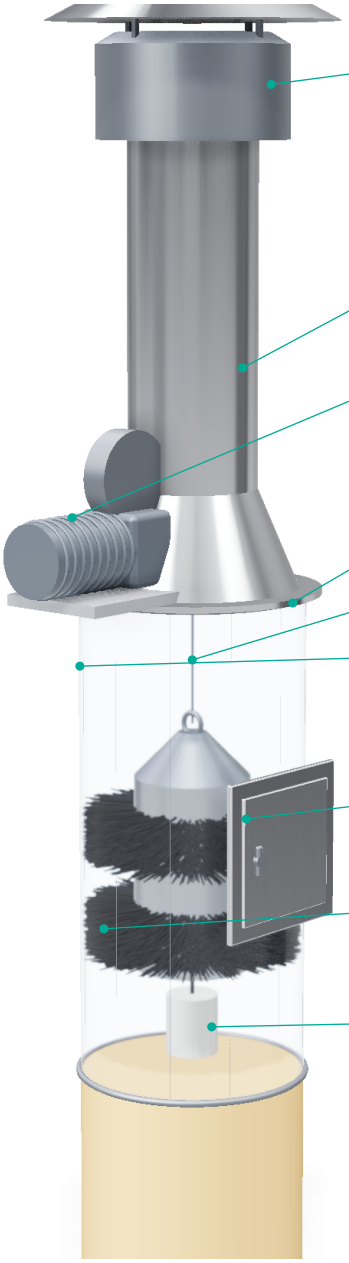
- **Quiet**
  Any metal chute can be noisy; the coating reduces the noise level considerably.
- **Durable coating**
  Excellent weathering properties; removable only by heat.
- **Site repair**
  Coating damaged in transport or installation is made good on site by Ostermeier.

Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.4 BRUSHING DEVICE

Brush Cleaning **System**

The brush unit sits in the top section of the chute, below the exhaust fan, behind an access door. The geared motor lowers the brush on a steel rope down the full height of the chute and returns it to its parked position.



1. **Exhaust fan**
   Top of the Ø340 mm vent
2. **Reducer & Ø340 mm vent**
   From chute head to fan
3. **Geared motor & rope drum**
   0.75 kW, with gear box and DC brake
4. **Chute head plate**
   SS 304, carries the motor frame
5. **Steel rope**
   Lowers and raises the brush
6. **Brush housing (shown transparent)**
   Top section of the Ø600 mm chute
7. **Access door**
   Service access to the brush unit
8. **Nylon brush head**
   Detachable stiff nylon brushes on a cylindrical holder
9. **Counterweight**
   Keeps the brush centred in the chute

BRUSH MOTOR

Motor type	Squirrel cage induction motor
Drive	Gear box with DC brake
Supply	1 phase, 220/230 V, 50 Hz
Power / speed	0.75 kW, 1382 rpm, 5.32 A
Model / origin	M80B-4, made in Italy

Illustrative 3D view. Top section drawn transparent to show the brush unit.

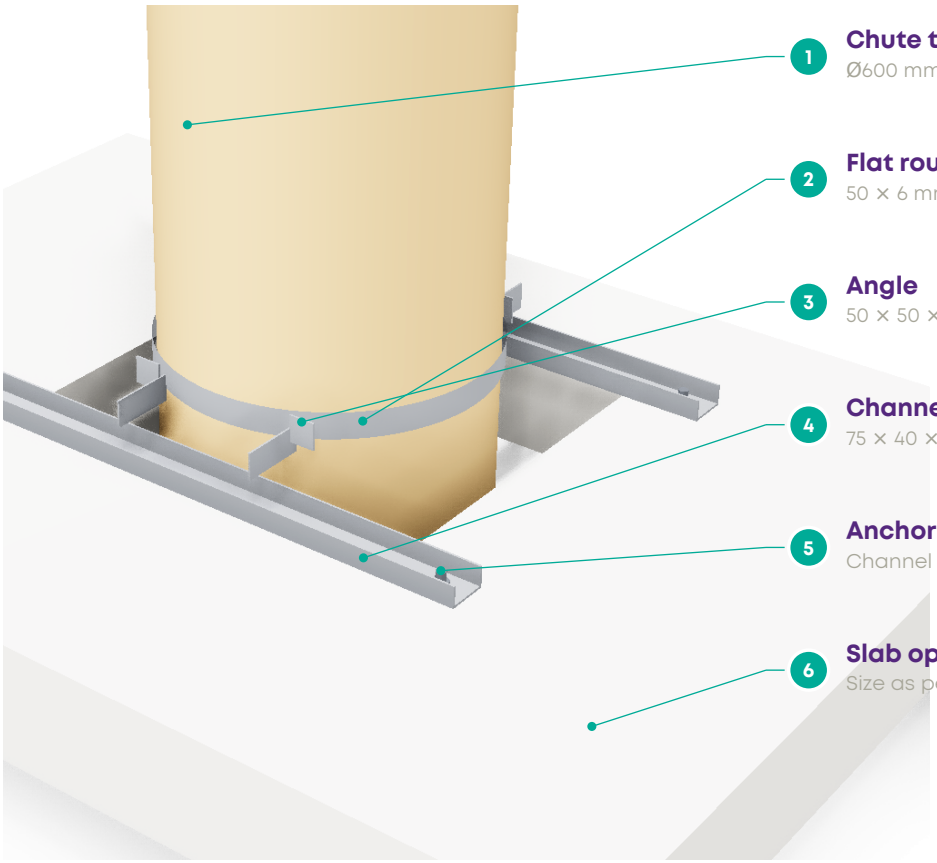
BRUSH & OPERATION

- **Full-height cleaning**
  Cleans the inside of the chute tube over its full length.
- **Automatic**
  Lowered and returned by the electric motor, started from the control panel.
- **Works with washing**
  Runs with the jet spray and disinfectant cycle; all doors stay locked.

3.5 SUPPORTING FRAME

GI Chute Supporting **Frame**

A galvanised iron frame supports the chute at every slab opening. A flat round frame clamps the chute and is welded to angles, which sit on channels bolted to the structural slab.



1. **Chute tube**
   Ø600 mm, passes through the slab opening
2. **Flat round frame**
   50 × 6 mm, fixed around the chute
3. **Angle**
   50 × 50 × 4 mm, welded to frame and channel
4. **Channel support**
   75 × 40 × 4 mm
5. **Anchor bolts**
   Channel bolted to the slab (S.S.L.)
6. **Slab opening**
   Size as per site

TECHNICAL DATA

Material	Galvanized iron
Flat frame	50 × 6 mm, round
Angle	50 × 50 × 4 mm
Channel	75 × 40 × 4 mm
Fixing	Channels bolted to structural slab level
Welding	Arc welded

KEY FEATURES

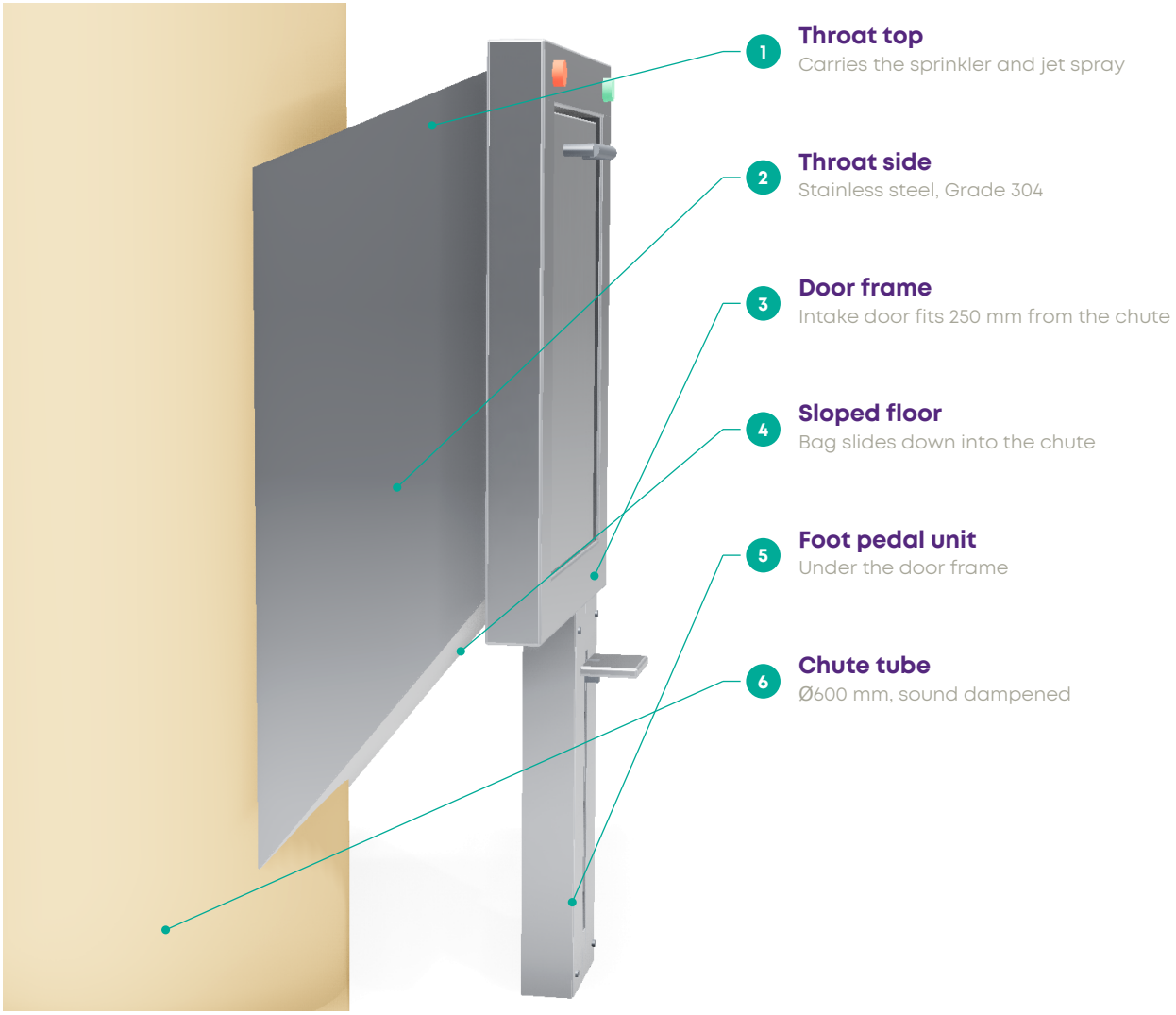
- **Every slab**
  One frame at each slab opening carries the chute.
- **Site fit**
  Slab opening size as per site conditions.

Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.6 INTAKE THROAT

Intake **Throat**

The stainless steel throat connects each intake door to the chute. Its floor slopes down into the chute so the bag slides in easily, and it carries the jet spray and the fire sprinkler.



TECHNICAL DATA

Material	Stainless steel, Grade 304
Clear opening	405 × 635 mm
Door position	250 mm from the chute
Accessories	Jet spray (left), glass bulb sprinkler (right)

KEY FEATURES

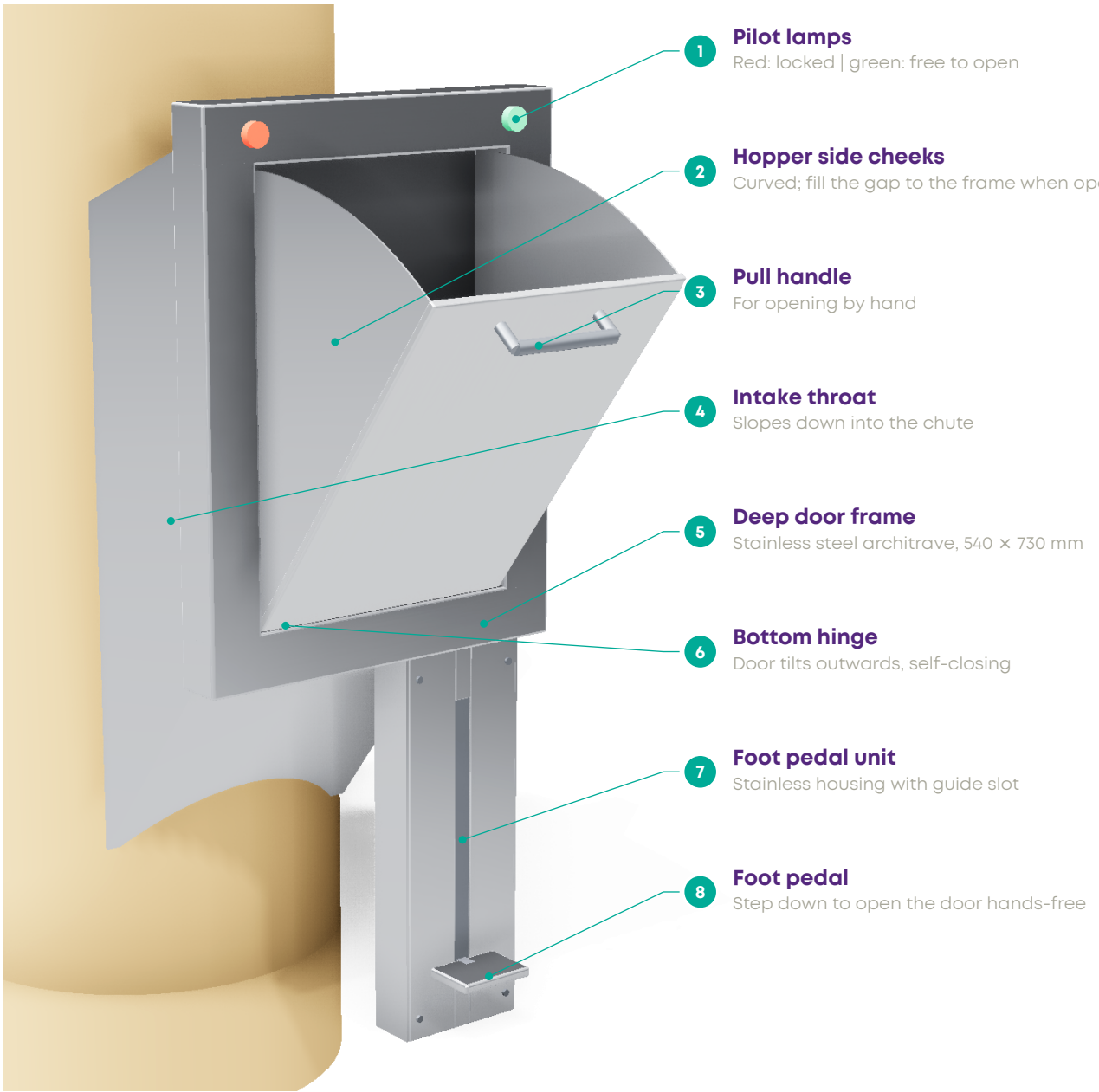
- **Easy loading**
  Helps the garbage bag slide down into the chute.
- **Built-in services**
  Fits the flushing and fire fighting accessories.

Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.7 INTAKE DOOR

Fire Rated Bottom Hinged **Door**

Stainless steel hopper door in a deep frame, one per floor. Shown open: the door tilts outwards on its bottom hinge and its curved side cheeks close the gap to the frame, so waste can only go into the chute.



TECHNICAL DATA

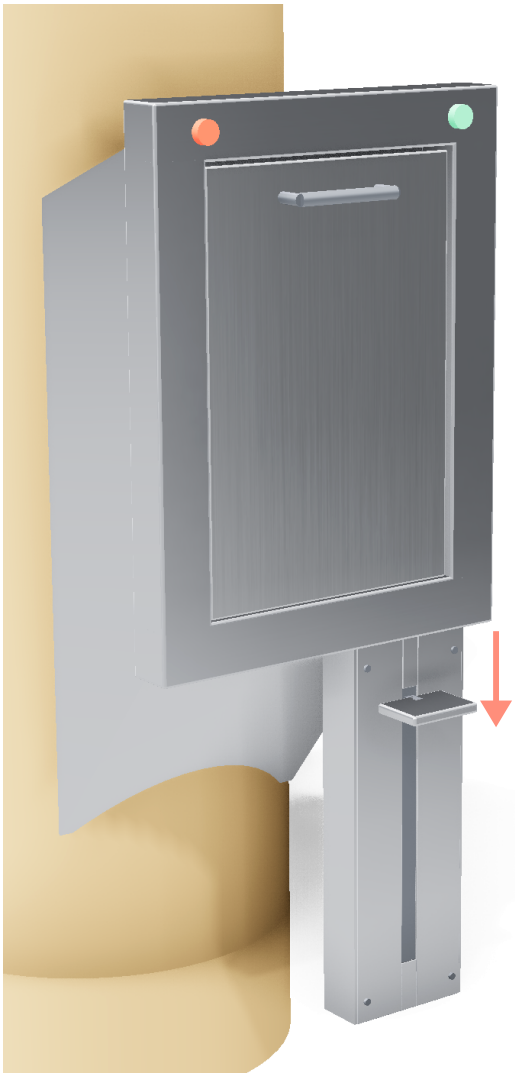
Manufacturer	Ostermeier FZE	**Door panel**	390 (W) × 580 (H) mm
Type	Bottom hinged hopper, interlocking	**Thickness**	1.2 mm (18 gauge)
Material	Stainless steel, Grade 304	**Fire rating**	**To be confirmed**
Architrave	540 (W) × 730 (H) mm	**Operation**	By hand or by foot pedal

Illustrative 3D view based on the Ostermeier intake door. Dimensions per manufacturer data.

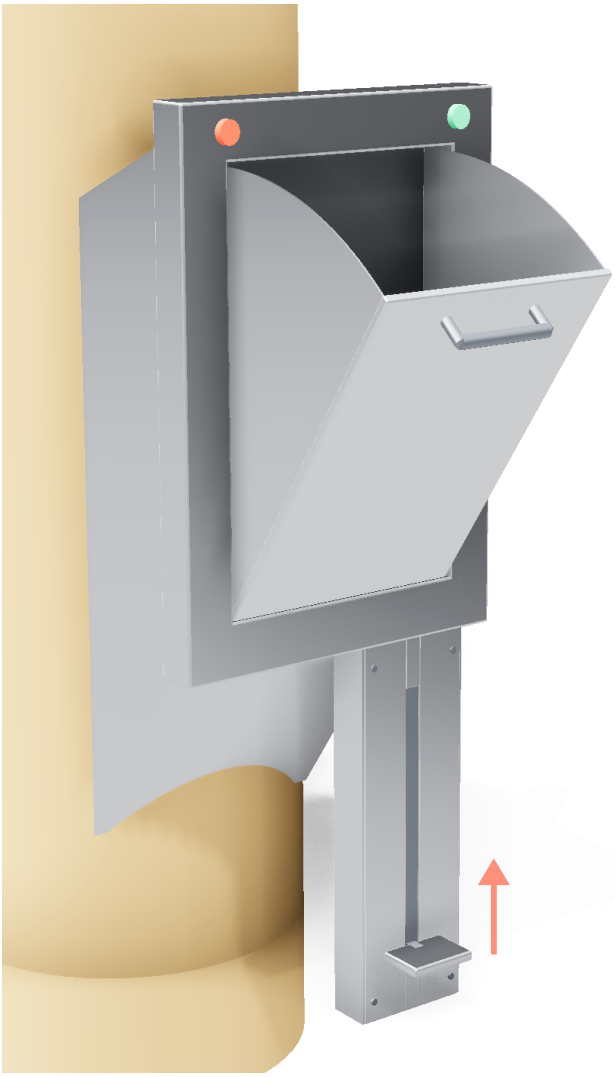
3.7 INTAKE DOOR

Foot Pedal **Operation**

The pedal slides in a vertical slot in the stainless housing under the door. Pressing it down pulls the door open; releasing it lets the door close and seal by itself. The interlock still applies: the pedal only opens a door that is free.



1 Pedal up: door closed
Door sealed in its frame. Green lamp: free to use.



2 Pedal pressed: door open
Door tilts out on its bottom hinge; drop the bag in.

HOW IT WORKS

01
Step on the pedal
The pedal moves down the slot and pulls the linkage.

02
Door opens
The door tilts outwards; the curved cheeks guide the bag in.

03
Bag drops
Waste slides down the sloped throat into the chute and falls to the trolley.

04
Release
The pedal returns up and the door closes and seals by itself.

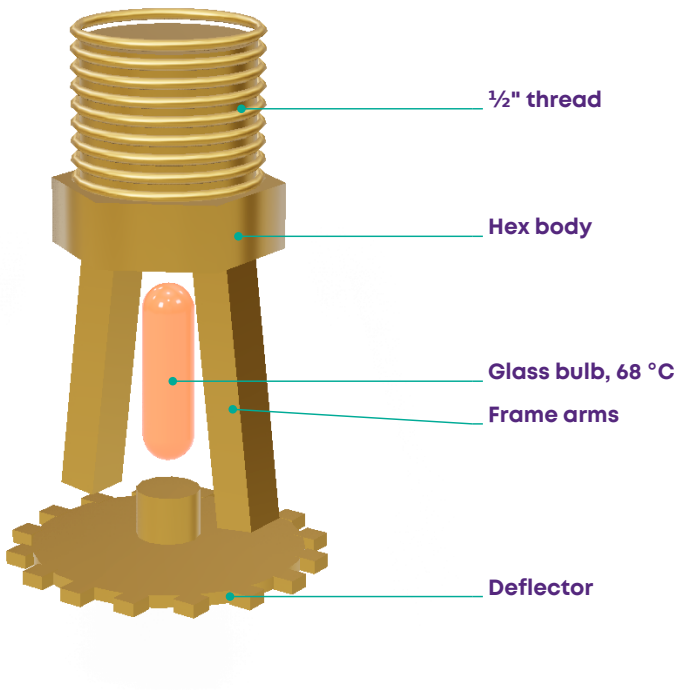
Illustrative 3D views based on the Ostermeier intake door and foot pedal unit.

3.8 FIRE PROTECTION

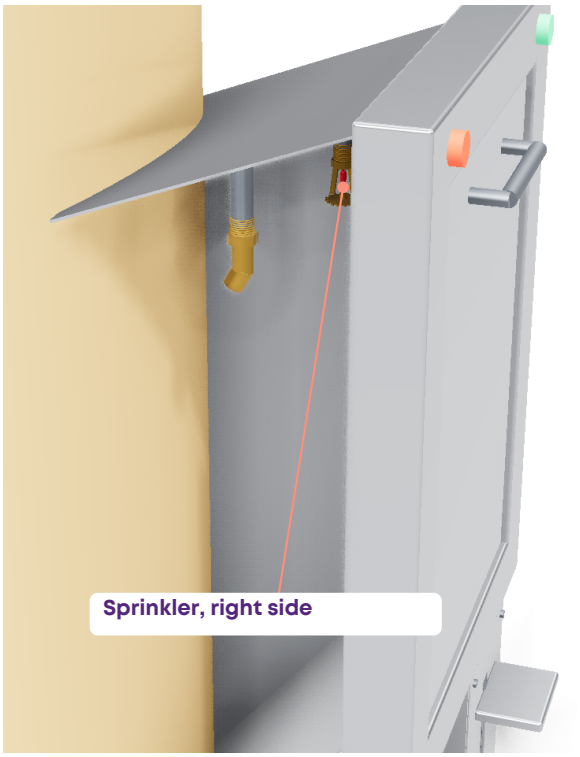
Glass Bulb **Sprinkler**

A pendent glass bulb sprinkler sits inside every intake throat, on the right side. If a fire inside the chute raises the temperature above 68 °C, the glass bulb breaks and the sprinkler douses the fire.

THE SPRINKLER



LOCATION | THROAT CUT AWAY



TECHNICAL DATA

Type	Glass bulb, pendent, ½"
Activation	68 °C
Brand	MAF / SHIELD / POWER (any DCD approved brand)
Location	Inside the intake throat, right side, every floor
Supply	½" line from the fire fighting riser to the female socket on the chute

KEY FEATURES

- **Automatic**
  No power needed; the bulb breaks at 68 °C.
- **Every intake**
  From the topmost intake level and on every floor.
- **Normal water supply**
  Pendent sprinklers can work with the normal water supply.

BY OTHERS

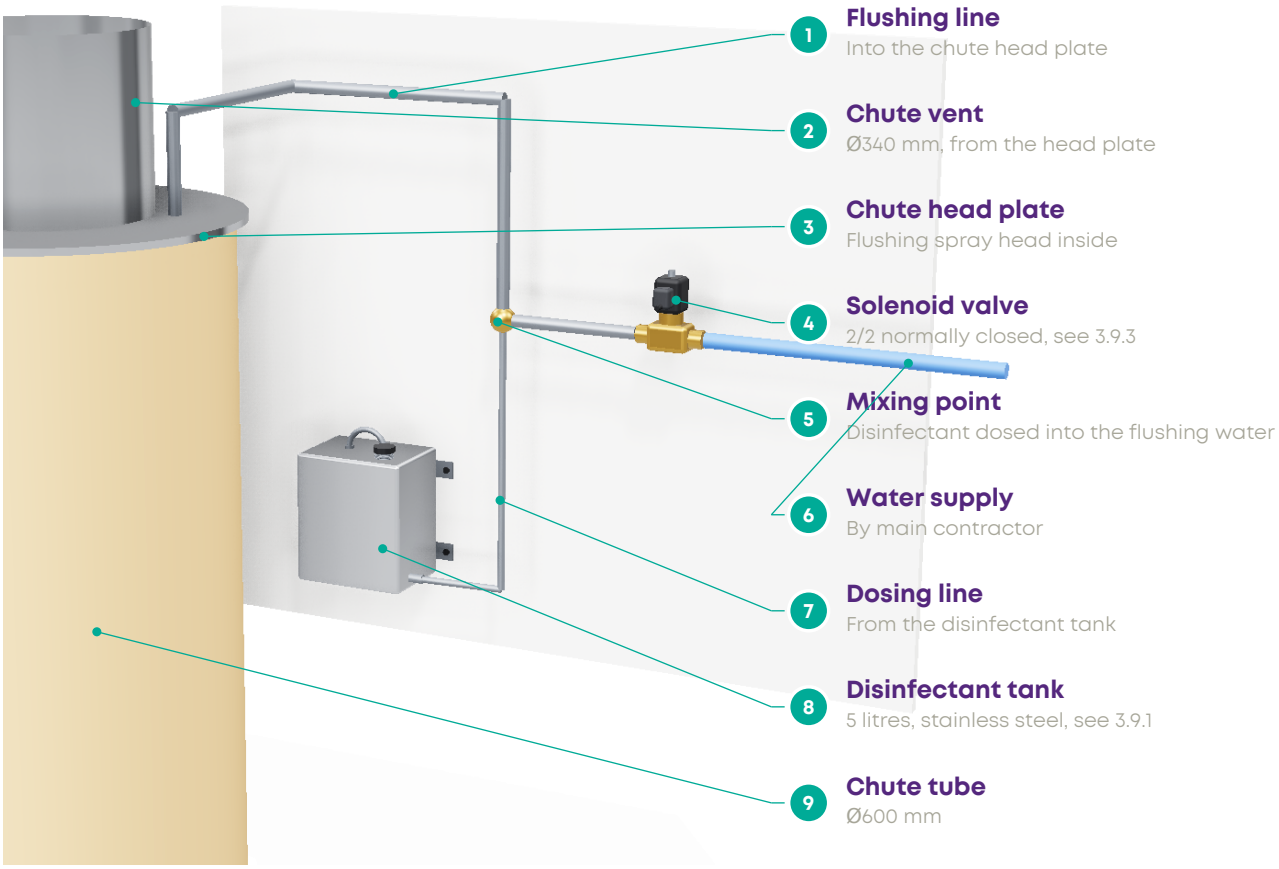
Feed from the main fire fighting riser line to each sprinkler socket.

Illustrative 3D views based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.9 CLEANING SYSTEM

Automatic Cleaning **System**

Automatic flushing with chemical disinfectant. A solenoid valve, opened from the control panel, lets water through; disinfectant from the tank is mixed in and the solution is sprayed from the head plate and the jet spray on every floor.



TECHNICAL DATA

Control	Main control panel, ground floor garbage room
Activation	Selector switch on the panel
Valve	Solenoid valve, Parker (alt. Castel / Danfoss)
Disinfectant	Dettol Antiseptic Disinfectant, see 3.9.2

KEY FEATURES

- **One switch**
  The cleaning cycle starts from a selector switch on the control panel.
- **Every floor**
  A jet spray inside each intake throat sprays the solution.
- **Doors locked**
  All intake doors stay locked while the chute is cleaned.

BY MAIN CONTRACTOR

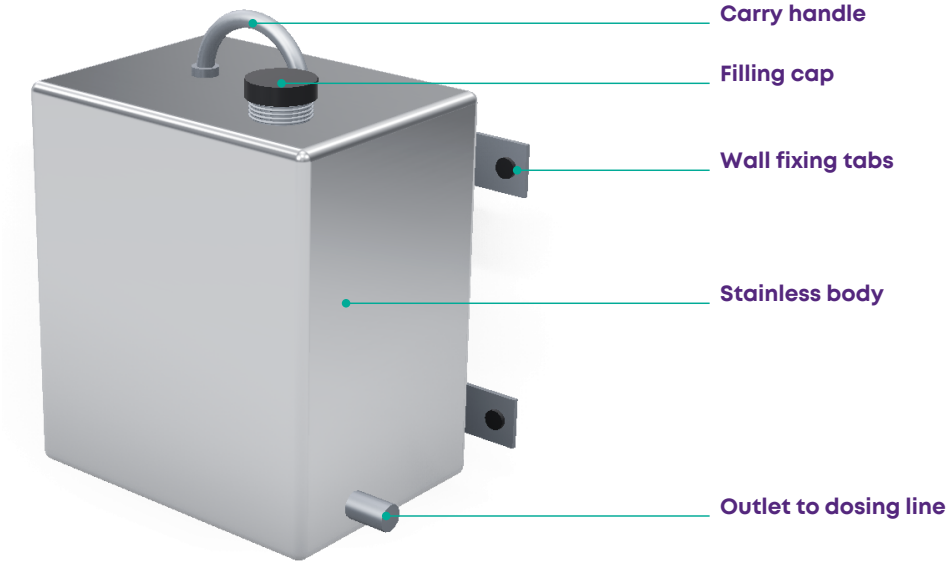
Water supply pipe to the chute head and its connection are not in our scope.

Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.9.1 DISINFECTANT TANK | 3.9.2 DISINFECTANT SOLUTION

Tank & **Disinfectant**

A 5 litre stainless steel tank holds the disinfectant that is dosed into the flushing water during the cleaning cycle.



3.9.1 TANK DATA

Material	Stainless steel
Capacity	5 litres
Finish	Mill finish
Size	200 × 150 × 230 mm

3.9.2 DISINFECTANT SOLUTION



Dettol Antiseptic Disinfectant

Dosed from the tank into the flushing water during the cleaning cycle. 5 litre container.

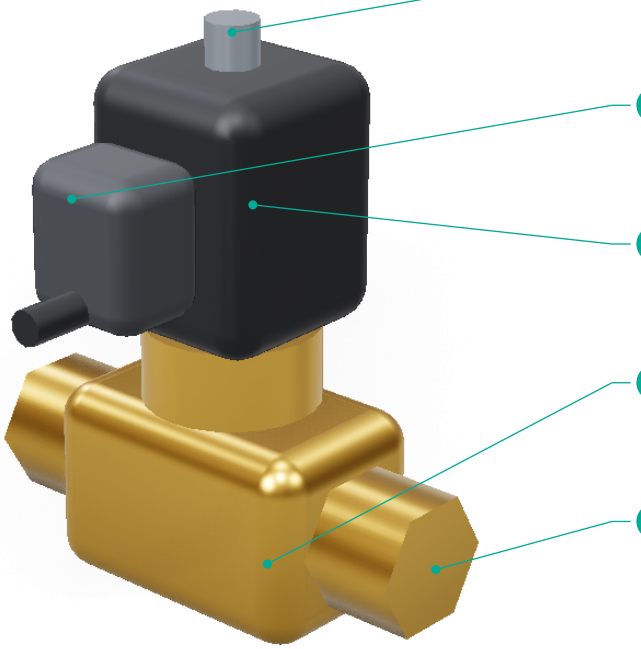
Active ingredient	Chloroxylenol (concentration as printed on the product label)
Other ingredients	Pine oil, isopropyl alcohol, castor oil, caramel, deionized water
Dilution (label)	Floors and hard surfaces 1:18 in water
Use	For professional use only
Brand	Dettol, Reckitt
Pack	5 litre

Tank: illustrative 3D view based on manufacturer data. Disinfectant: product photo and label data. Full data in Appendix A-3.9.2.

3.9.3 SOLENOID VALVE

Solenoid **Valve**

A 2/2 normally closed solenoid valve with BSP threads controls the water supply to the cleaning system. It opens only when the cleaning cycle is running. Brand: Parker; alternatives Castel or Danfoss.



1. **Coil fixing nut**
2. **Electrical connector**
   Cable from the control panel
3. **Solenoid coil**
   Energised by the control panel
4. **Brass valve body**
   2/2 way, normally closed
5. **BSP threaded port**
   Inlet and outlet

TECHNICAL DATA

Brand	Parker
Alternatives	Castel / Danfoss
Function	2/2 way, normally closed
Connection	BSP threads
Seals	NBR / FKM / EPDM options per catalogue

KEY FEATURES

- **Fail-safe**
  Normally closed: no water flows unless the cycle is on.
- **Datasheet**
  Full manufacturer catalogue data in Appendix A.

Illustrative 3D view based on manufacturer data. Original manufacturer drawings are reproduced in Appendix A.

3.10 CONTROL PANEL

Master Control **Panel**

The master control panel in the ground floor garbage room controls the intake doors, the cleaning and brushing systems and the exhaust fan. It holds the main isolator switch, indicating lamps and selector switches.



FRONT PANEL LEGEND

1. Control voltage 24 V on
2. All door unlock
3. One door open
4. All door lock
5. Door lock / unlock switch
6. Fire alarm on
7. Exhaust fan on
8. Cleaning system on
9. Exhaust fan off / on
10. Cleaning system auto-off-manual switch
11. Main isolator
12. Control 220 V on
13. Brushing system on
14. Brushing motor fault
15. Brushing system on push button
16. Emergency stop push button

TECHNICAL DATA

Front size	500 (W) × 600 (H) mm
Location	Ground floor garbage collection room
Control voltage	24 V and 220 V circuits
Schematics	Manufacturer diagrams in Appendix A

CONTROLS

- **Doors**
  Interlock status, lock / unlock switch.
- **Cleaning & brushing**
  Auto-off-manual selector, brushing start button, fault lamp.
- **Safety**
  Main isolator, emergency stop, fire alarm lamp.

Illustrative 3D view; layout from the manufacturer front-view drawing. Lamp colours shown are indicative.

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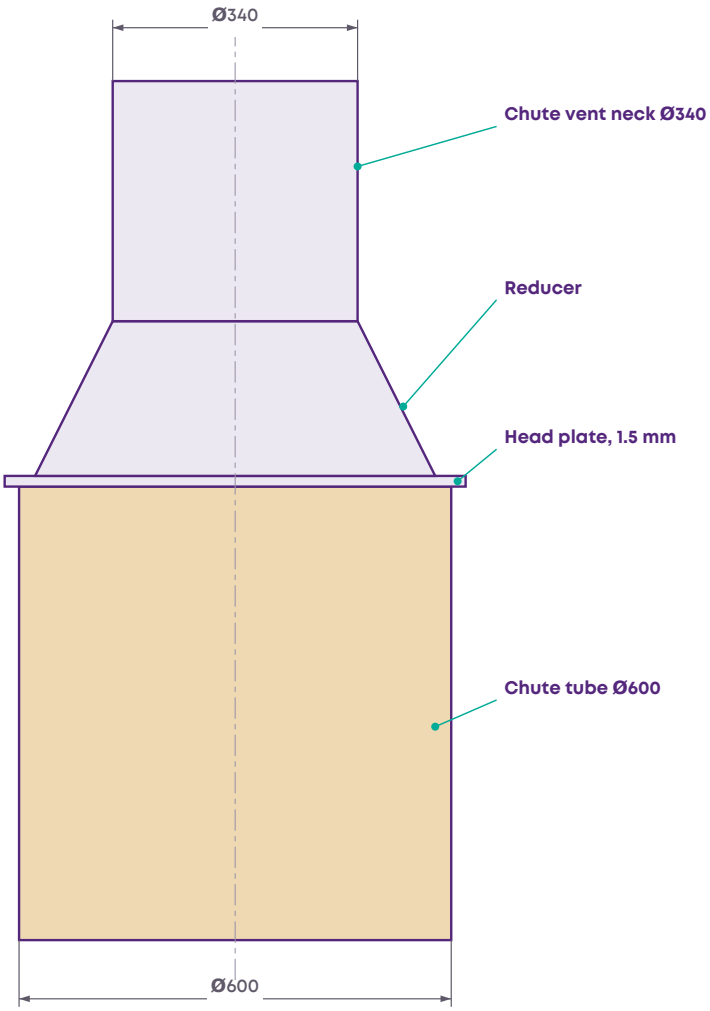
APPENDIX A

Material Submittal | Garbage Chute System

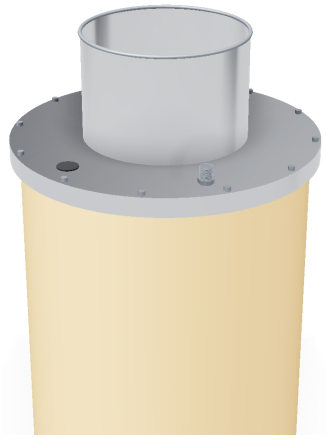
APPENDIX A | TECHNICAL SHEET 3.1

Chute Head Plate

ELEVATION



3D VIEW



DATA

Material	Stainless steel
Grade	AISI 304
Thickness	1.5 mm
Vent neck	Ø340 mm, at the centre

NOTES

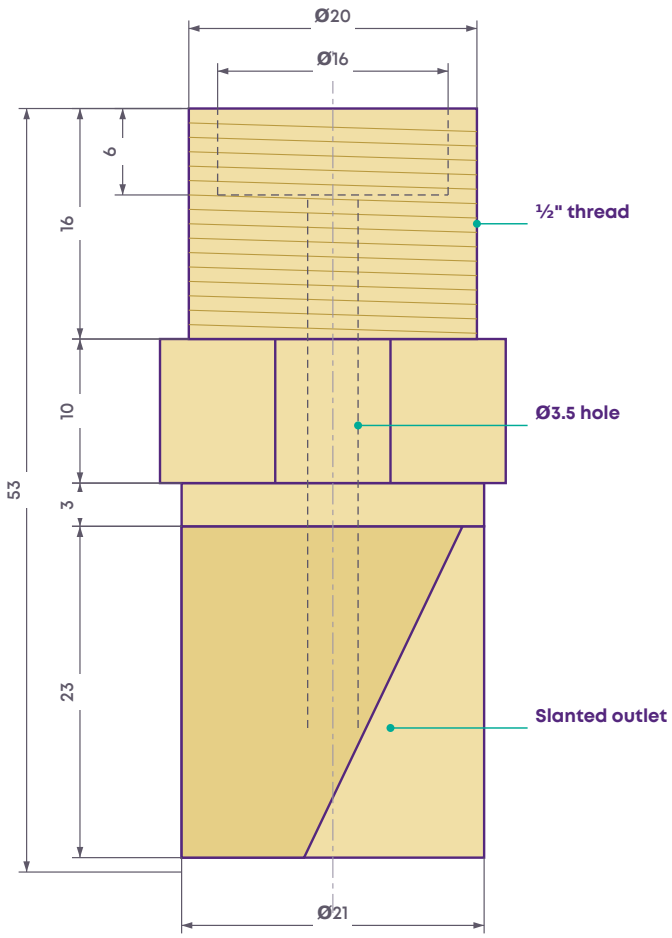
1. Same diameter as the chute tube; holes provided for the flushing system and air vent.
2. The plate can be removed for maintenance.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.1	**Chute head plate with Ø340 vent neck**	Stainless steel AISI 304, 1.5 mm	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.2

Jet Spray

ELEVATION | DIMENSIONS IN MM



3D VIEW



DATA

Material	Brass
Connection	½" thread
Type	Hanger type
Line pressure	2 bar required

NOTES

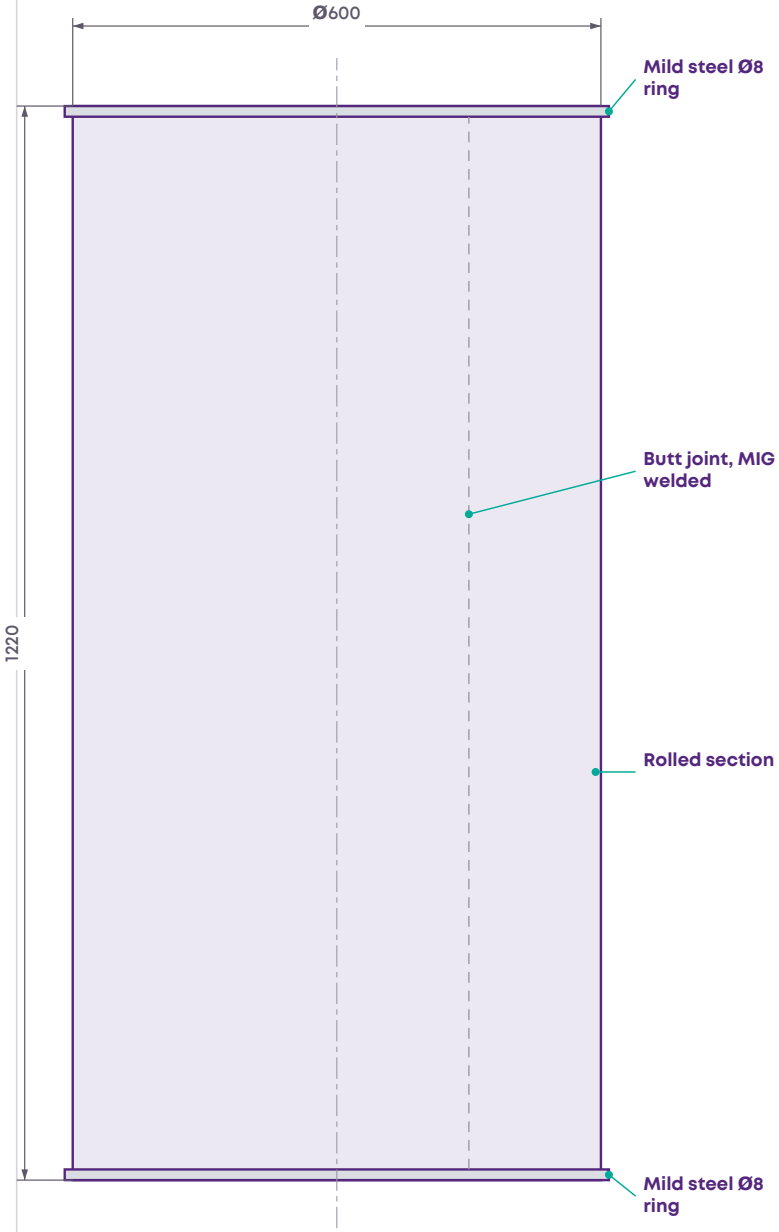
1. Inside the intake throat, left side, at every intake door level, and one on the chute head plate.
2. Activated from the main control panel during the cleaning cycle.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.2	Jet spray nozzle, hanger type	Brass, ½" thread	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

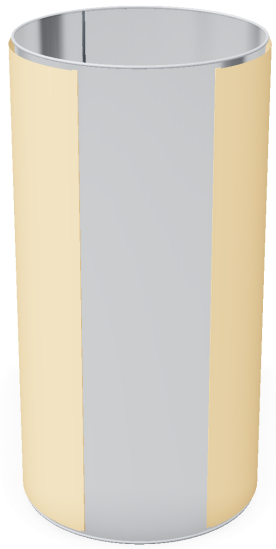
APPENDIX A | TECHNICAL SHEET 3.3

Chute Tube

ELEVATION OF ONE SECTION



3D VIEW



DATA

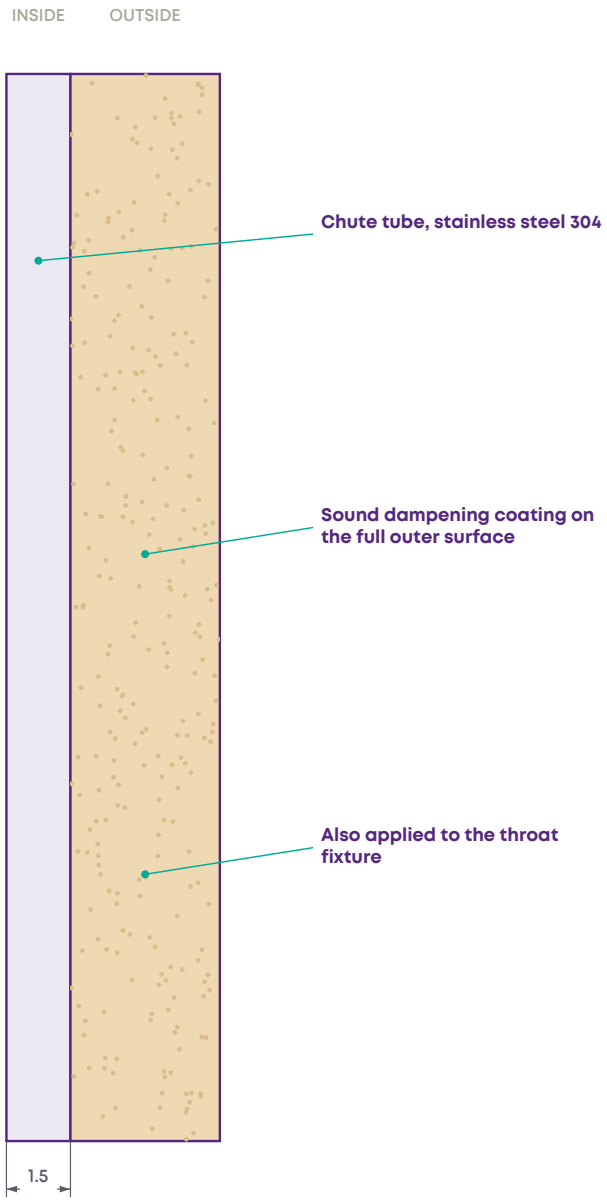
Material	Stainless steel
Grade	304
Thickness	1.5 mm
Diameter	600 mm
Length	To suit the actual building height

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.3	Chute tube section	Stainless steel grade 304, 1.5 mm	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

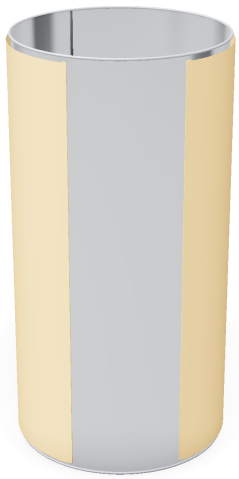
APPENDIX A | TECHNICAL SHEET 3.3.1

Sound Dampening Material

WALL SECTION | ENLARGED



3D VIEW



NOTES

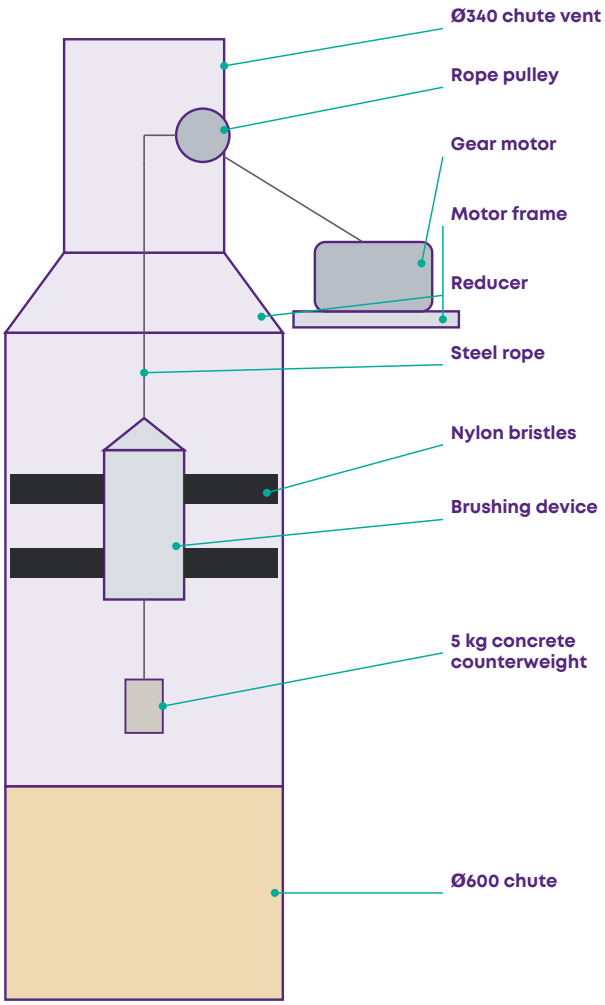
1. The insulant coating applied in fabrication reduces the noise level considerably.
2. Applied in the factory to the complete external surfaces of the chute tube and the throat fixture.
3. Excellent weathering properties; can only be removed by heat.
4. Paint damage in transport or installation is rectified on site by Ostermeier.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.3.1	**Sound dampening coating**	Factory-applied insulant compound	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

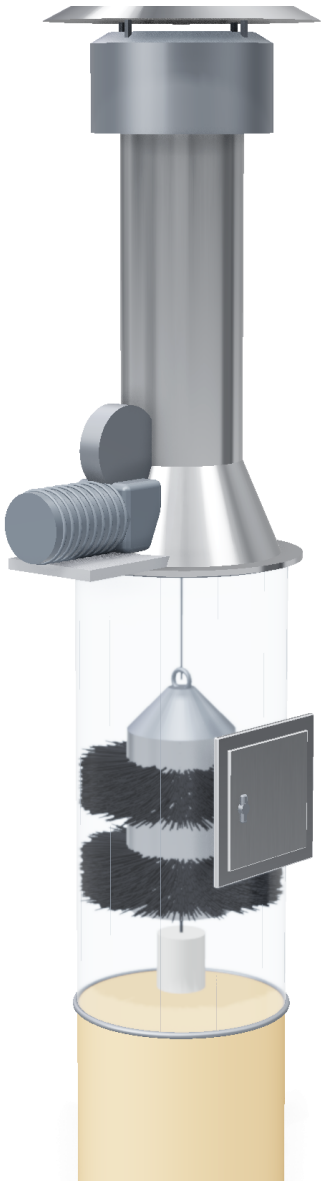
APPENDIX A | TECHNICAL SHEET 3.4

Brushing Device

ARRANGEMENT



3D VIEW | HOUSING SHOWN TRANSPARENT



BRUSH MOTOR

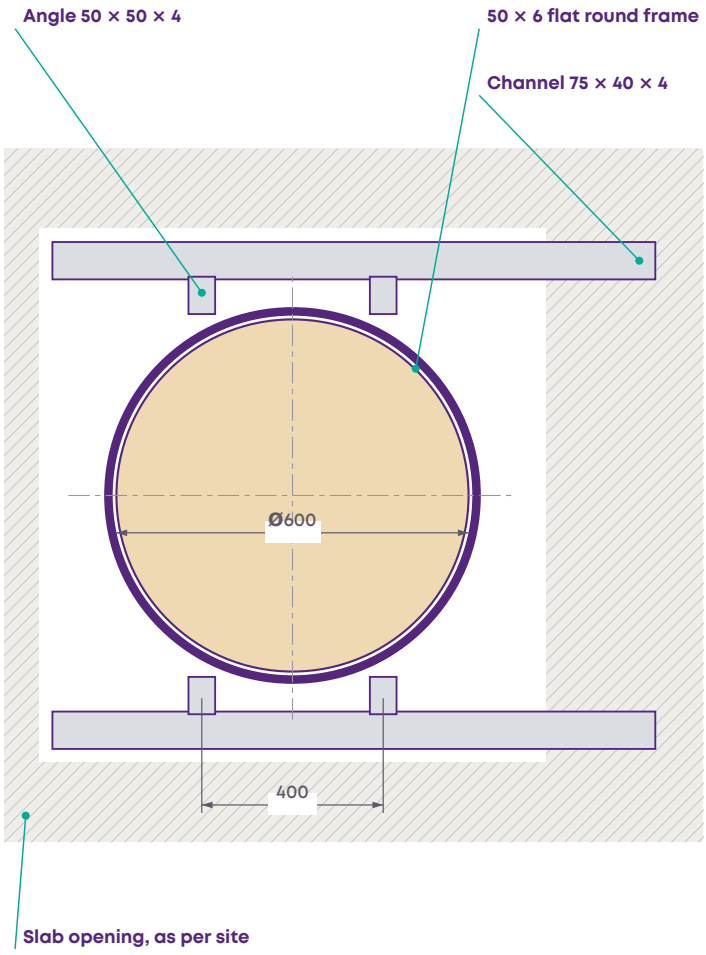
Motor type	Squirrel cage induction, gear box & DC brake
Supply	1 phase, 220/230 V, 50 Hz
Power	0.75 kW, 1382 rpm, 5.32 A
Type / origin	M80B-4, made in Italy

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.4	**Automatic brushing device**	Steel housing, nylon brushes, mild steel frame	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

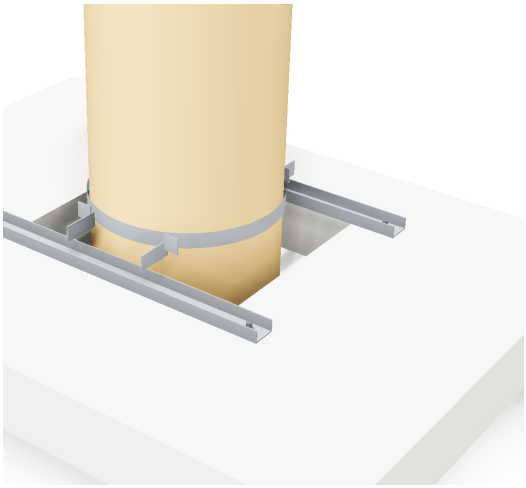
APPENDIX A | TECHNICAL SHEET 3.5

GI Chute Supporting Frame

PLAN AT SLAB OPENING



3D VIEW



NOTES

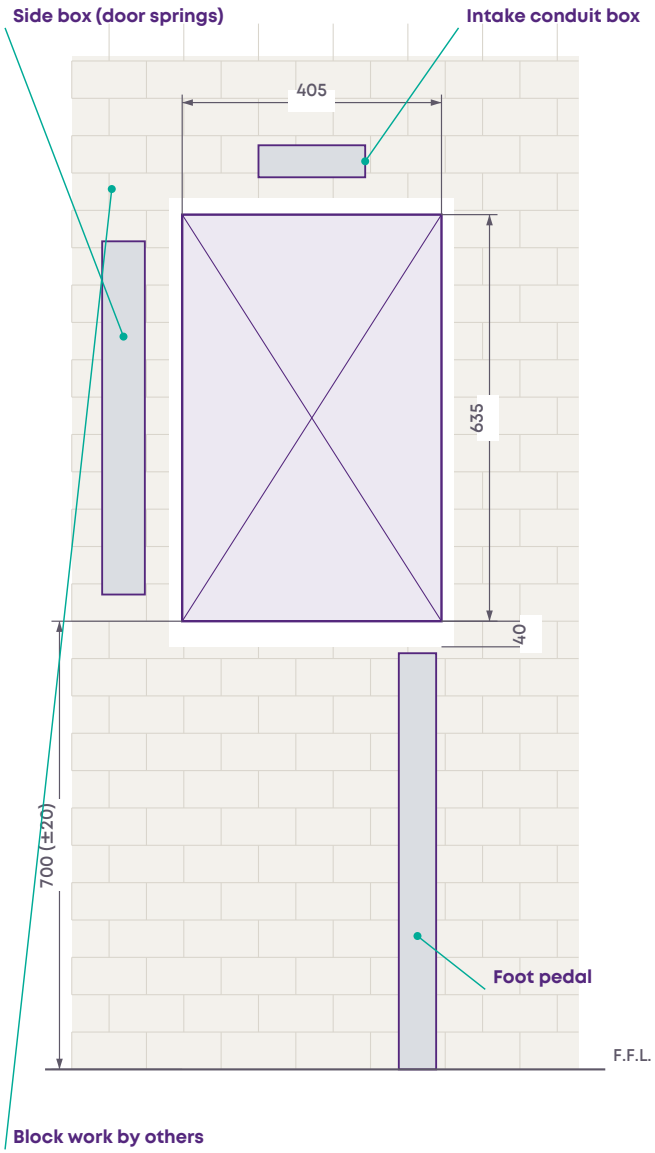
1. Flat round frame 50 × 6 fixed around the chute and welded to the 50 × 50 × 4 angles.
2. Angles arc welded to the 75 × 40 × 4 channel supports.
3. Channels bolted to the structural slab level (S.S.L.).
4. One frame at every slab opening; galvanised iron.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.5	**Supporting frame at slab opening**	Galvanised iron	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.6

Intake Throat

FRONT ELEVATION AT INTAKE



3D VIEW



NOTES

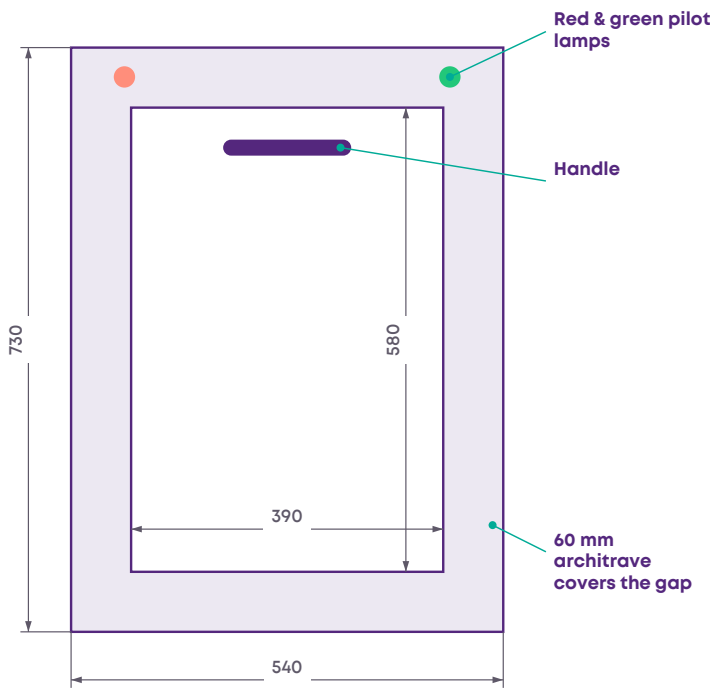
1. Clear opening 405 × 635 mm; the intake door is fitted 250 mm away from the chute.
2. 20 mm gap to the right and left of the intake; 40 mm gap at the bottom of the throat.
3. Block work in front of the chute only after chute erection, plumbing and electrical works.
4. Jet spray on the left, glass bulb sprinkler on the right.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.6	Intake throat and wall opening	Stainless steel grade 304	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

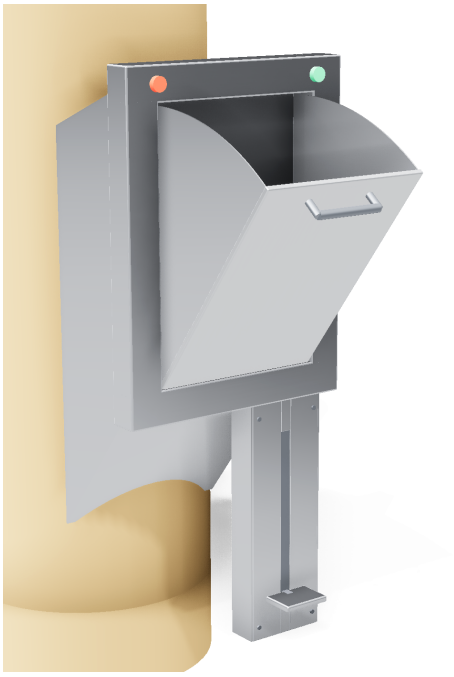
APPENDIX A | TECHNICAL SHEET 3.7

Bottom Hinged Intake Door with Foot Pedal

FRONT ELEVATION



3D VIEW | DOOR OPEN



NOTES

1. Electromagnetic interlock: only one door opens at a time; all doors lock during cleaning and maintenance.
2. Pilot lamps show the lock / unlock status.
3. Bottom hinged with door spring; opened by hand or by the foot pedal.

DATA

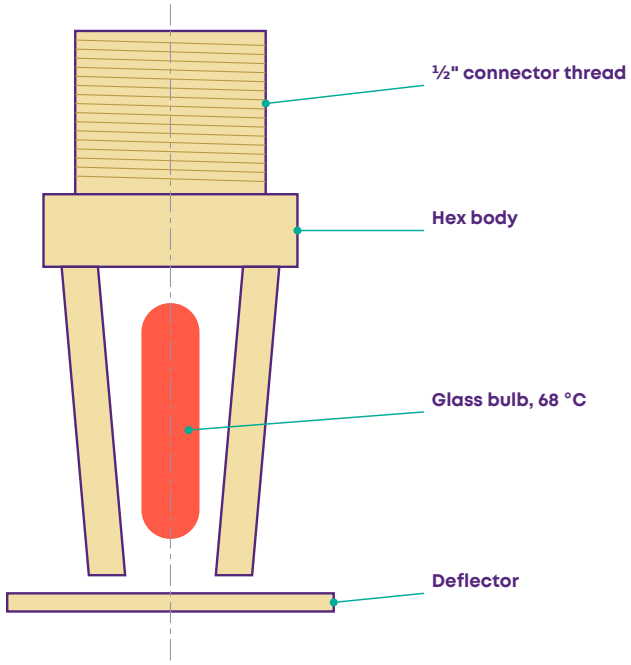
Manufacturer	Ostermeier FZE
Type	Door interlocking type
Material	Stainless steel grade 304
Outer dimension	540 × 730 mm
Door panel	390 × 580 mm
Thickness	1.2 mm (18 gauge)
Fire rating	To be confirmed

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.7	Intake door, interlocking type	Stainless steel grade 304, 1.2 mm (18 ga)	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.8

Glass Bulb Sprinkler

ELEVATION



LOCATION | RIGHT SIDE OF THROAT



NOTES

1. At the topmost intake level and on every floor, inside the throat on the right side.
2. Above 68 °C the glass bulb breaks and the sprinkler douses the fire.
3. Fed by a ½" line from the main fire fighting riser to the female socket on the chute.

DATA

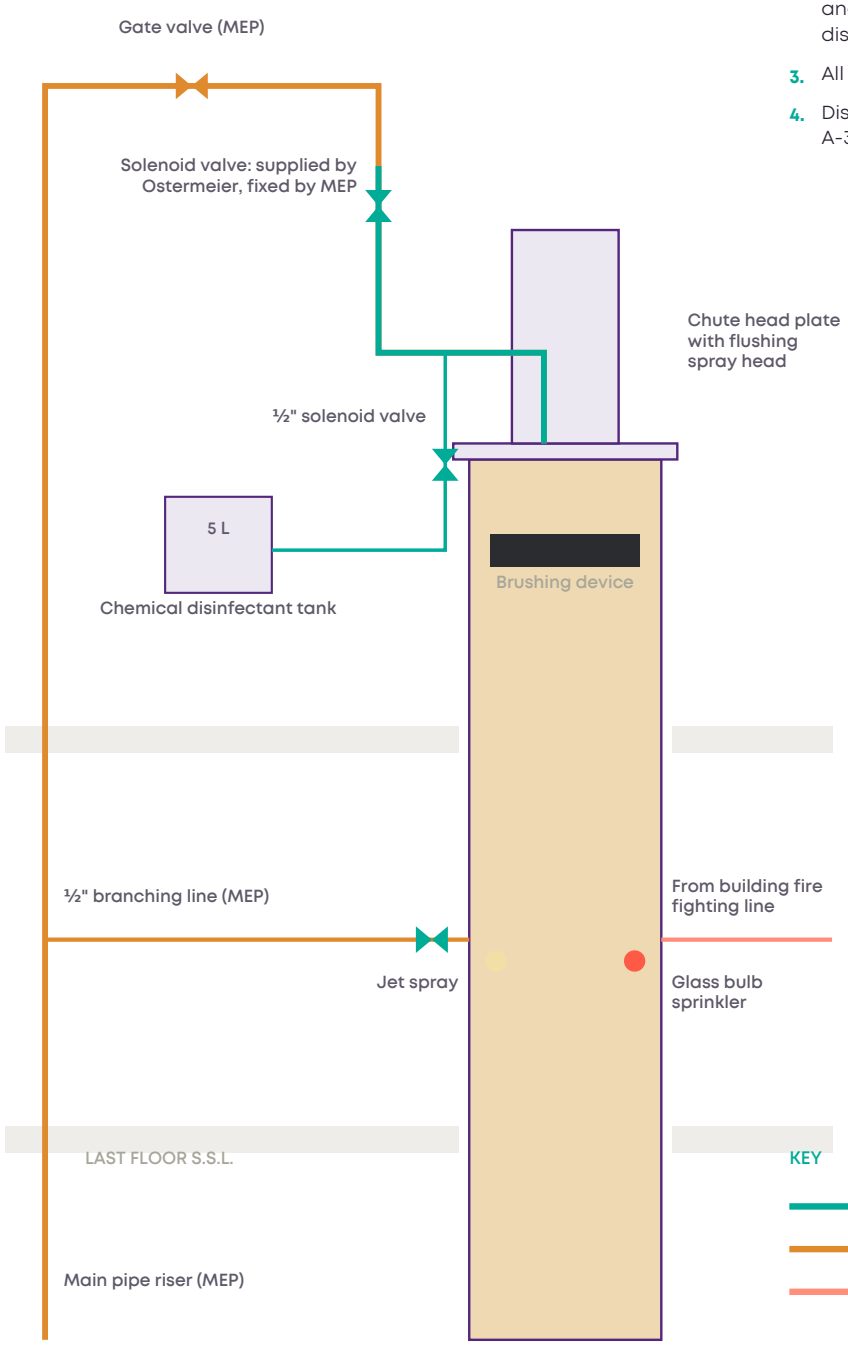
Type	½", pendent
Activation	68 °C
Brand	MAF / SHIELD / POWER (any DCD approved)

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.8	Glass bulb sprinkler, pendent	Brass body, glass bulb 68 °C	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.9

Cleaning System | Scope Diagram

SCHEMATIC | WHO SUPPLIES WHAT



NOTES

1. The cleaning cycle is started from a selector switch on the master control panel in the ground floor garbage room.
2. Water flushes through the head plate spray and the jet spray on every floor, with disinfectant dosed from the 5 litre tank.
3. All intake doors stay locked during cleaning.
4. Disinfectant: Dettol Antiseptic Disinfectant, see A-3.9.2.

KEY

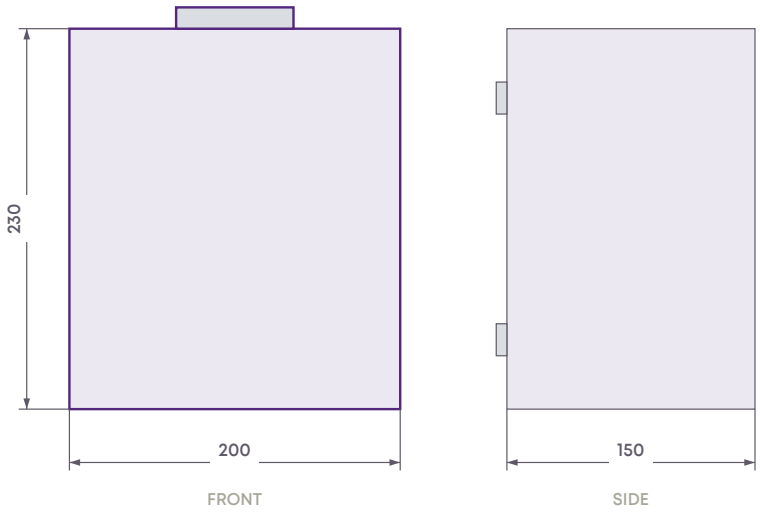
- Supplied and fixed by Ostermeier
- By MEP contractor
- Fire fighting line by MEP contractor

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.9	**Automatic flushing, chemical disinfectant and solenoid valve**	Stainless steel / brass fittings	See colour key	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

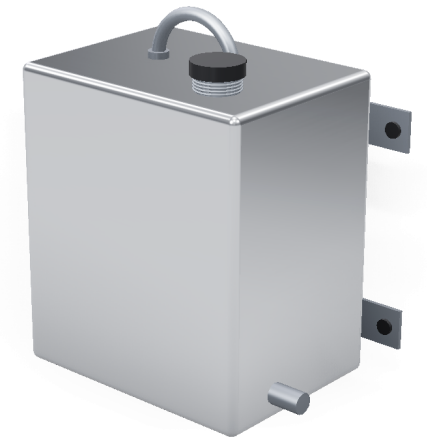
APPENDIX A | TECHNICAL SHEET 3.9.1

Disinfectant Tank

FRONT | SIDE



3D VIEW



NOTES

1. Holds the disinfectant dosed into the flushing water during the cleaning cycle.
2. Wall mounted next to the chute head.

DATA

Material	Stainless steel
Capacity	5 litres
Finish	Mill finish
Size	200 × 150 × 230 mm (W × D × H)

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.9.1	**Disinfectant tank, 5 litres**	Stainless steel, mill finish	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.9.2

Disinfectant Solution



Dettol Antiseptic
Disinfectant

Used in the 5 litre tank of the automatic cleaning system. During the cleaning cycle it is dosed into the flushing water and sprayed into the chute from the head plate and the jet spray on every floor.

Product	Dettol Antiseptic Disinfectant, 5 litre
Active ingredient	Chloroxylenol (concentration as printed on the product label)
Other ingredients	Pine oil, isopropyl alcohol, castor oil, caramel, deionized water
pH	9.0 to 10.0 (5% solution)
Rideal-Walker coefficient	3.2
Dilution (label)	Floors and hard surfaces 1:18 in water
Use	For professional use only
Manufacturer	Soap and Chemicals Industrial & Trading Co. (SOCIRA), Sharjah, UAE, under licence from Reckitt Benckiser Arabia

Safety: For external use only; never use undiluted. Keep out of reach of children. Store below 30 °C. Follow the product label and safety data sheet.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.9.2	**Disinfectant for the cleaning system**	Liquid, 5 L container	See product data	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.9.3

Solenoid Valve | Selection Data

Brand: **Parker**, 7321B series (alternative brands: Castel / Danfoss). The cleaning system uses the ½**" solenoid valve**; the ½" rows are highlighted.

NBR seals max. media temperature 90 °C

Port G	Orifice mm	Flow m³/h	Flow l/min	Min. press. bar	Max. diff. bar	Weight kg	Manual control	Speed control	Description	Part no.	Dim. drg
3/8"	13	3.0	50.0	0.1	20	0.55	–	–	7321BBN00	443776W	2
3/8"	13	3.0	50.0	0.1	20	0.55	●	–	7321BBN01	443777W	2
1/2"	**13**	**3.0**	**50.0**	**0.1**	**20**	**0.58**	**–**	**–**	**7321BAN00**	**443779W**	**2**
1/2"	**13**	**3.0**	**50.0**	**0.1**	**20**	**0.58**	**●**	**–**	**7321BAN01**	**443780W**	**2**
3/4"	20	8.4	139.9	0.1	20	1.02	–	–	7321BCN00	443782W	3
3/4"	20	8.4	139.9	0.1	10	1.02	●	–	7321BCN01	443783W	3
3/4"	20	8.4	139.9	0.1	10	1.02	●	●	7321BCN02	443784W	3
1"	25	9.6	159.9	0.1	20	1.08	–	–	7321BDN00	443786W	3
1"	25	9.6	159.9	0.1	10	1.08	●	–	7321BDN01	443787W	3
1"	25	9.6	159.9	0.1	10	1.08	●	●	7321BDN02	443788W	3
1 1/4"	35	25.2	419.8	0.1	10	3.15	–	–	7321BEN00	443790W	4
1 1/4"	35	25.2	419.8	0.1	5	3.15	●	–	7321BEN01	443791W	4
1 1/4"	35	25.2	419.8	0.1	5	3.15	●	●	7321BEN02	443792W	4
1 1/2"	40	30.0	499.8	0.1	10	2.90	–	–	7321BFN00	443794W	4
1 1/2"	40	30.0	499.8	0.1	5	2.90	●	–	7321BFN01	443795W	4
1 1/2"	40	30.0	499.8	0.1	5	2.90	●	●	7321BFN02	443796W	4
2"	50	37.2	619.8	0.1	10	4.30	–	–	7321BGN00	443798W	4
2"	50	37.2	619.8	0.1	5	4.30	●	–	7321BGN01	443799W	4
2"	50	37.2	619.8	0.1	5	4.30	●	●	7321BGN02	443800W	4
2 1/2"	65	66.0	1099.6	0.2	10	13.60	●	●	7321BLN02	443802W	5
3"	75	80.0	1332.8	0.2	10	11.90	●	●	7321BMN02	443803W	5

Nominal pressure: 25 bar; 1 1/4" to 3": 16 bar. ● = included, – = not included.

FKM seals max. media temperature 140 °C

Port G	Orifice mm	Flow m³/h	Flow l/min	Min. press. bar	Max. diff. bar	Weight kg	Manual control	Speed control	Description	Part no.	Dim. drg
3/8"	13	3.0	50.0	0.1	20	0.55	–	–	7321BBV00	444492W	2
1/2"	**13**	**3.0**	**50.0**	**0.1**	**20**	**0.58**	**–**	**–**	**7321BAV00**	**444494W**	**2**
3/4"	20	8.4	139.9	0.1	20	1.02	–	–	7321BCV00	444497W	3
1"	25	9.6	159.9	0.1	20	1.08	–	–	7321BDV00	443804W	3

Nominal pressure: 25 bar.

EPDM seals max. media temperature 140 °C

Port G	Orifice mm	Flow m³/h	Flow l/min	Min. press. bar	Max. diff. bar	Weight kg	Manual control	Speed control	Description	Part no.	Dim. drg
3/8"	13	3.0	49.98	0.1	10	0.55	–	–	7321BBH00	443778W	2
1/2"	**13**	**3.0**	**49.98**	**0.1**	**10**	**0.55**	**–**	**–**	**7321BAH00**	**443781W**	**2**
3/4"	20	8.4	139.94	0.1	10	1.02	–	–	7321BCH00	443785W	3
1"	25	9.6	159.94	0.1	10	1.08	–	–	7321BDH00	443789W	3
1 1/4"	35	25.2	419.83	0.1	10	3.15	–	–	7321BEH00	443793W	4
1 1/2"	40	30.0	499.80	0.1	10	2.90	–	–	7321BFH00	443797W	4
2"	50	37.2	619.75	0.1	10	4.30	–	–	7321BGH00	443801W	4

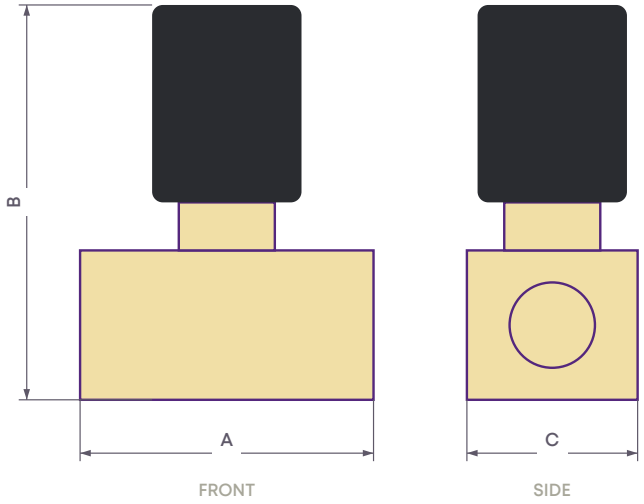
Nominal pressure: 25 bar; max. pressure for steam: 4 bar.

SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.9.3	**Solenoid valve, 2/2 normally closed, BSP threads**	Brass body	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | TECHNICAL SHEET 3.9.3

Solenoid Valve | Dimensions

FRONT | SIDE



3D VIEW



NOTES

1. 2/2 way, normally closed: opens only when the coil is energised by the control panel.
2. Connection: BSP (G) threads.
3. Coil with DIN connector; cable from the master control panel.
4. The project uses the ½" valve (highlighted).

OVERALL DIMENSIONS | PARKER CATALOGUE 8801/UK

Port G	A mm	B mm	C mm	Dim. drawing
3/8"	69	99.5	40	2
1/2"	**72**	**101.5**	**40**	**2**
3/4"	100	107	65	3
1"	104	112.5	65	3

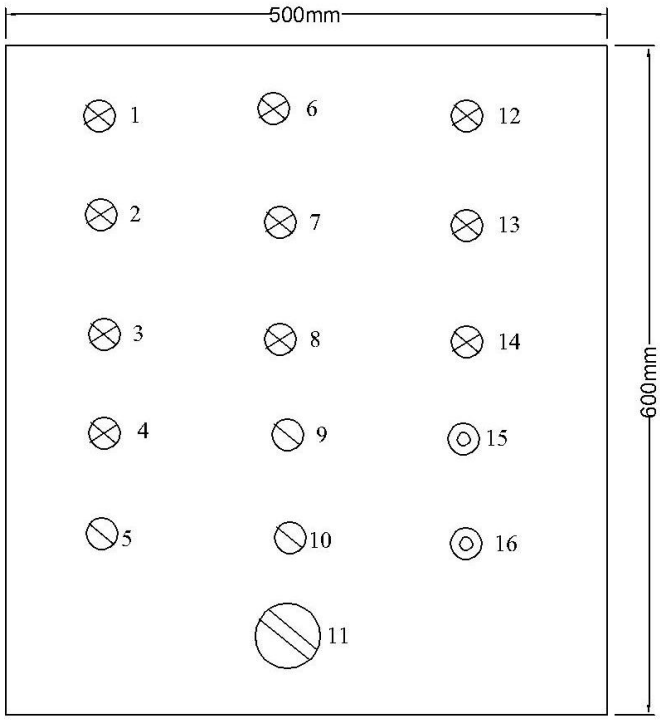
SHEET	ITEM	MATERIAL	SUPPLIED BY	SCALE	SOURCE
A-3.9.3	**Solenoid valve, 2/2 normally closed**	Brass body, coil with DIN connector	Ostermeier FZE	NTS	Ostermeier FZE, JK/OSTS/CENT/MS/Rev.0

APPENDIX A | MANUFACTURER DOCUMENT

3.10 Control Panel

The main control panel consists of the main isolator switch, indicating lamps and switches for activating various functions such as, exhaust fan.

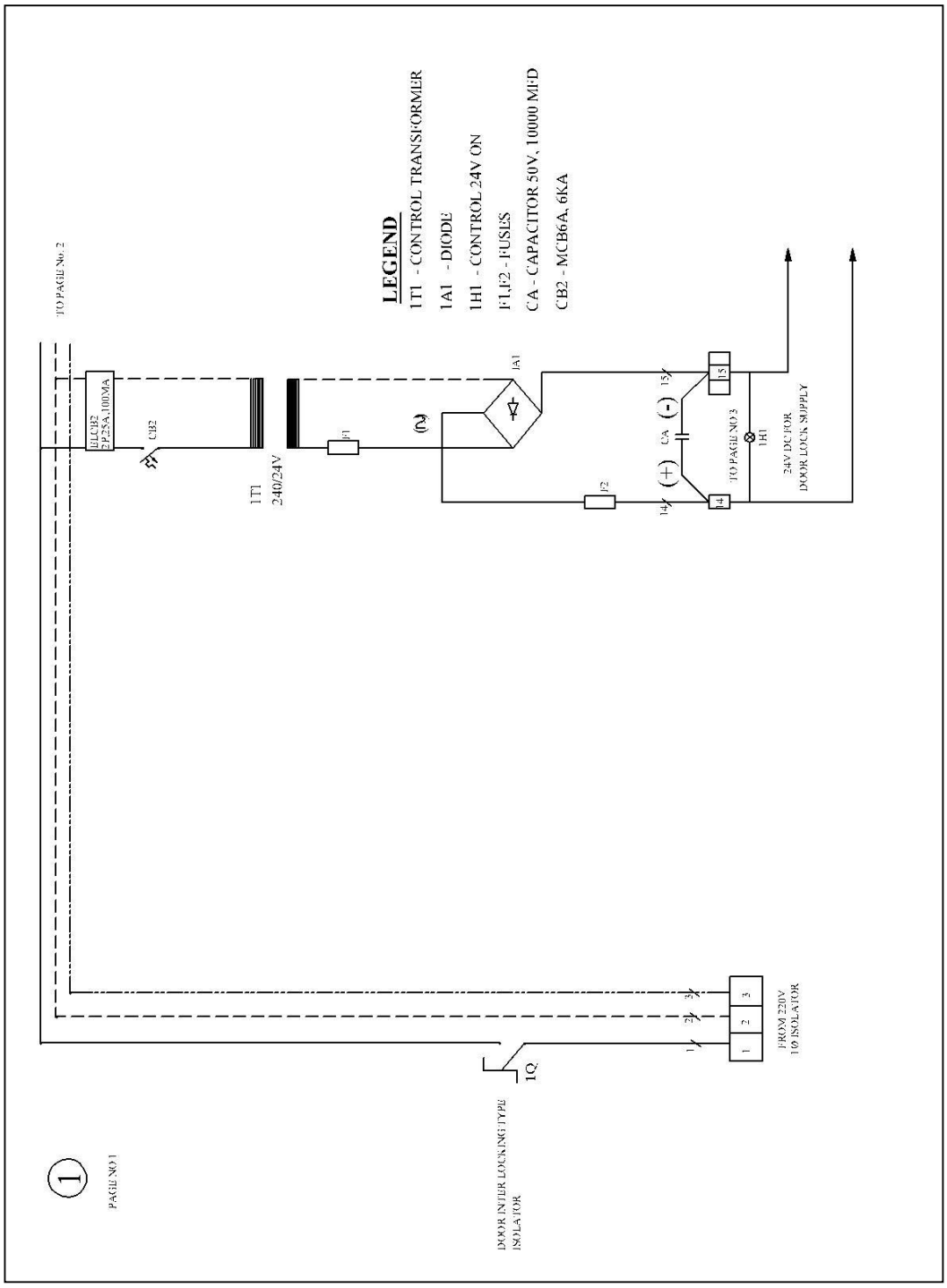
- The main control panel is located in the Ground floor Garbage collection room.



1. CONTROL VOLTAGE 24V ON
2. ALL DOOR UNLOCK
3. ONE DOOR OPEN
4. ALL DOOR LOCK
5. DOOR LOCK UNLOCK SWITCH
6. FIRE ALRAM ON
7. EXHAUST FAN ON
8. CLEANING SYSTEM ON
9. EXHAUST FAN OFF/ON
10. CLEANING SYSTEM AUTO-OFF-MANUAL SWITCH
11. MAIN ISOLATOR
12. CONTROL 220 V ON
13. BRUSHING SYSTEM ON
14. BRUSHING MOTOR FAULT
15. BRUSHING SYSTEM ON PUSH BUTTON
16. EMERGENCY STOP PUSH BUTTON

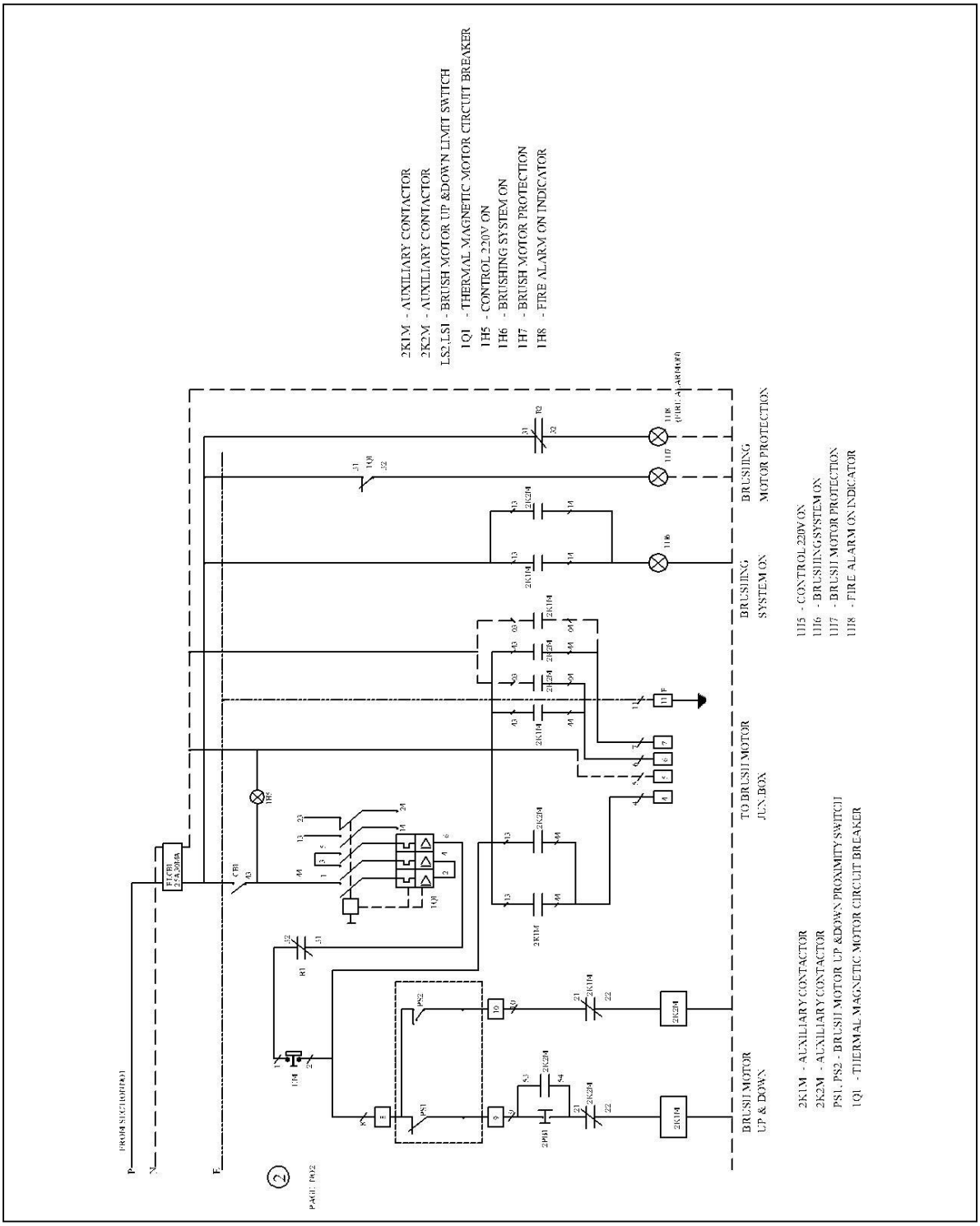
APPENDIX A | MANUFACTURER DOCUMENT

3.10.1 Control Panel Schematic Diagram



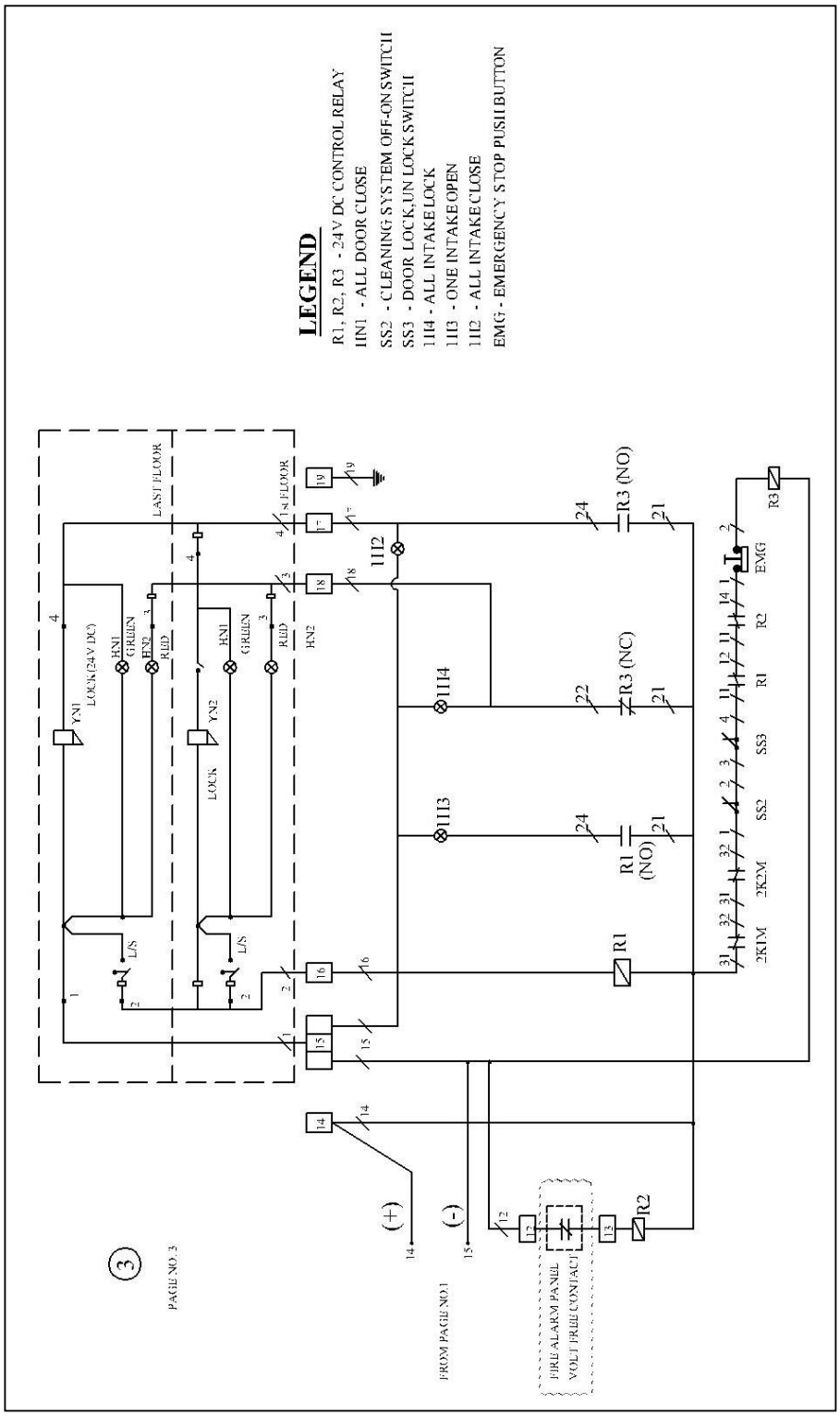
APPENDIX A | MANUFACTURER DOCUMENT

3.10.1 Schematic Diagram (cont.)



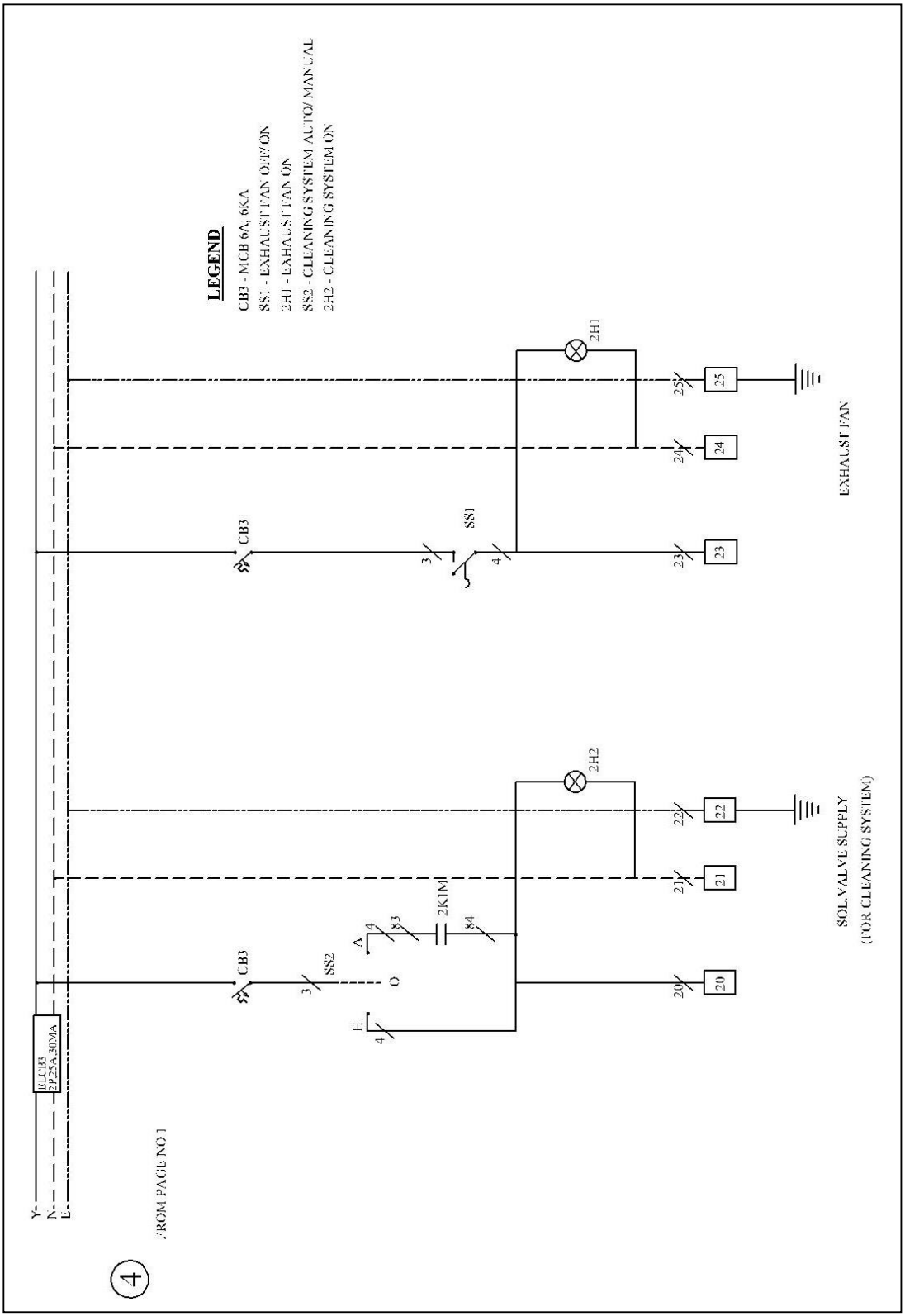
APPENDIX A | MANUFACTURER DOCUMENT

3.10.1 Schematic Diagram (cont.)



APPENDIX A | MANUFACTURER DOCUMENT

3.10.1 Schematic Diagram (cont.)



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