Patent no. GB2576814 European Community Design Registration No. 006204541-0001

Forest Group UK

Filter Feeder

User Manual & Maintenance Guide

Manufactured & Distributed by: Forest Drainage Products Limited

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Contents

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Site Installation

- When selecting a suitable location on site to house the **Filter Feeder™** consideration should be given to access for delivery and removal.

- The **Filter Feeder™** must be placed in a secure area of the site and recommend to be fenced off. Stop blocks are advisable on the approach to the tipping area.

- A trained Banksman must be present to always supervise the reversing of plant.

- It is recommended that to assist in efficient operation, the **Filter Feeder™** be located on a level hard standing with a footprint sufficient to house the **unit dimensions 6000 x 2700mm** with a fully laden weight of approximately **17 tonnes.** Consideration should also be given to ease of access around the unit for cleaning and maintenance.

- To assist you on deciding on best practice to allow for efficient access for tipping into the **Filter Feeder™** please see three methods that could be taken into consideration. When deciding on which method is best suited to your specific site environment please ensure that the **unit height of 1000mm** is considered on any design to allow for clearance when tipping and for removal of the pre-filter units.

- A temporary works design will be required when installing a concrete access ramp.

Temporary works access ramp

Split level access

Modular access system

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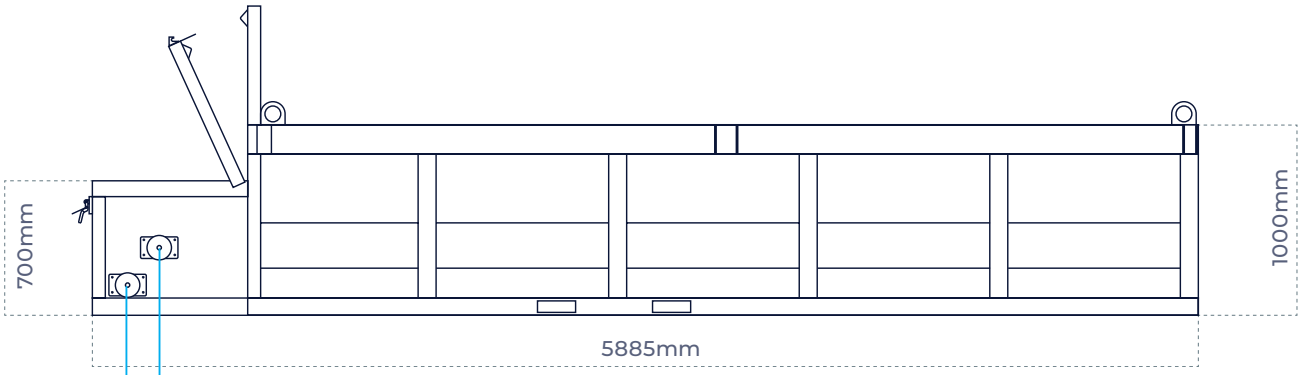
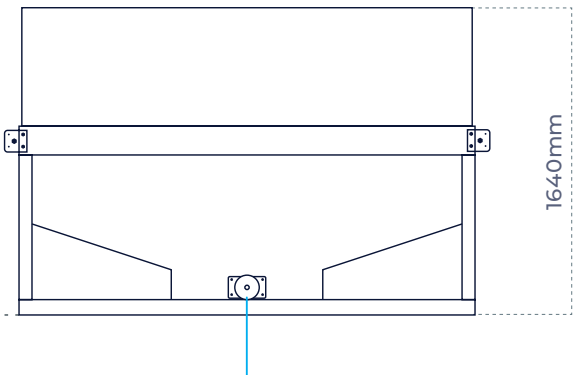
Filter Feeder

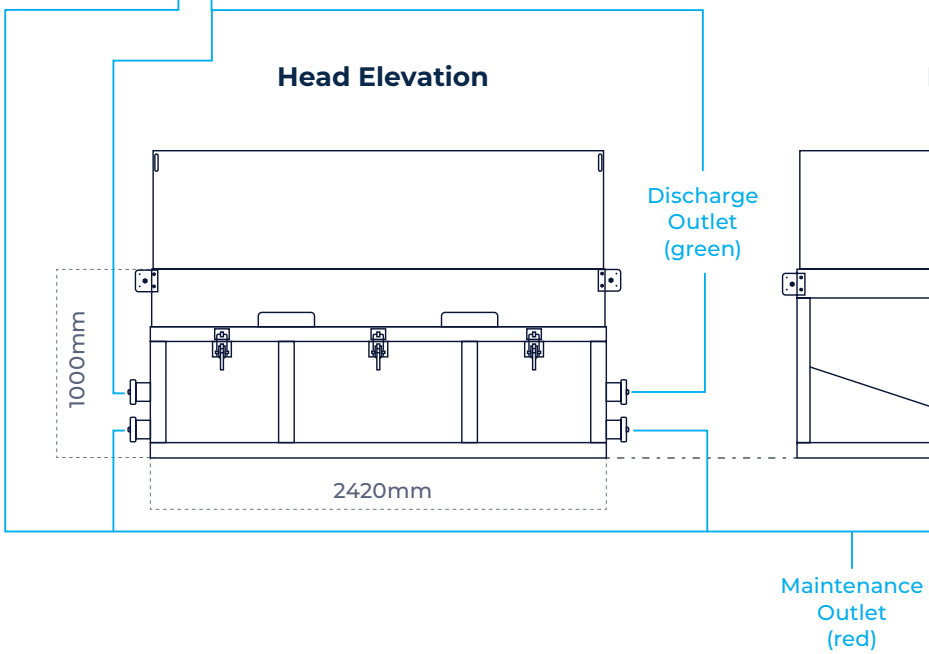
Side Elevation



Head Elevation

End Elevation





Date: September 2025

Unit – Safe Working Load – 7500kg

▲ Unit safe working load plate example

Every **Filter Feeder™** unit is assigned a unique identification number and clearly engraved Safe Working Load (SWL) rating. The ID plate displayed on the unit confirms the SWL of 7.5 tonnes (7500 kg). This rating defines the maximum permissible load that can be safely lifted, supported, or suspended by the equipment during operation.

The SWL marking is a critical safety indicator and must never be exceeded. Overloading may result in structural deformation, equipment fatigue, or catastrophic failure of the lifting points or supporting frame. Operators and site supervisors are responsible for ensuring compliance with the stated limit at all times.

APPENDIX 06 - TEST REPORT RMP.14

Please Note: This report does not allow the equipment to be put into service.
An EC Declaration of Conformity or a LOLER Report of Thorough Examination may be required.

Customer Order Number	Certex Order Number
P125562	1411413-1

Location of Test	Date of Test
CERTEX - GL2 2RN	28.08.2025

Name and Address of Customer	Name and Address of Supplying Unit
GRAIL ENGINEERING LTD NEW TOWN STEAM MILLS GLOUCESTER GL14 3JE	CEREX UK LTD UNIT 14, QUADRANT DISTRIBUTION CENTRE QUADRANT WAY QUEDGELEY GLOUCESTER GL2 2RN.

Identification Number or Reference Number	Description of the Item to be Tested	Quantity to be Tested
10305-A1	FILTER FEEDER FRAME - 10305A 7500 KG CAPACITY	ONE

Description of the Tests Applied
PROOF LOAD OF 3000 KG APPLIED TO EACH OF FOUR CORNER LUGS AND HELD FOR 5 MINUTES.

Results of the Test Identifying Any Defects
NO DEFECTS RECORDED - PASSED

Each unit has undergone independent proof load testing to verify structural integrity. A controlled load was applied to all lift points and held for the required duration, with no defects recorded.

This certification confirms compliance with lifting standards and ensures the unit meets operational safety requirements. The test certificate should be kept with the product documentation and may be required during inspections or safety audits.

◄ Test certificate example

Baskets – Safe Working Load – 5000 kg each

▲ Basket 1 safe working load plate example

▲ Basket 2 safe working load plate example

Please Note: This report does not allow the equipment to be put into service.
An EC Declaration of Conformity or a LOLER Report of Thorough Examination may be required.

Customer Order Number	Certex Order Number
P125672	1412446-1

Location of Test	Date of Test
GRAIL ENGINEERING - GL14 3JE	15.09.2025

Name and Address of Customer	Name and Address of Supplying Unit
GRAIL ENGINEERING LTD NEW TOWN STEAM MILLS GLOUCESTER GL14 3JE	CEREX UK LTD UNIT 14, QUADRANT DISTRIBUTION CENTRE QUADRANT WAY QUEDGELEY GLOUCESTER GL2 2RN.

Identification Number or Reference Number	Description of the Item to be Tested	Quantity to be Tested
10305-B1	CAGE ASSEMBLY - 10305-ASSY 2 5000 KG CAPACITY	ONE

Description of the Tests Applied
PROOF LOAD OF 7500 KG APPLIED THROUGH FOUR CORNER LUGS TO CAGE ASSEMBLY AND HELD FOR 5 MINUTES.

Results of the Test Identifying Any Defects
NO DEFECTS RECORDED - PASSED

◄ Test certificate example

Each of the internal filtration baskets is individually rated with an SWL of 5.0 tonnes (5000 kg). These plates indicate the maximum safe load for each basket when installed within the unit. Loads must be distributed evenly, and operators should ensure that material deposition does not create concentrated weight clusters that could exceed the basket's localised stress capacity.

The baskets have undergone separate proof loading procedures to verify their load capacity independently from the main frame. As confirmed in the test documentation, each basket successfully sustained its rated load during testing without deformation, stress-fracturing, or weld fatigue.

Preparing the Filter Head

STEP 1

Open the head of the unit using the handles

STEP 2

Secure lid to the upright using the carabiners, wire and hooks attached to the unit

STEP 3

Begin installing filter bags into the base of the head, tucking under lip to assist securing. These are identified by an orange label stating ‘bottom layer’

STEP 4

Continue until all five filters bags are installed and fill the base

STEP 5

Lift bracing bar into position above the base layer of filter bags securing into place with the supplied R clip

STEP 6

Begin installing the second layer of filter bags ensuring a tight fit so that all eight bags may be installed. These are identified by an orange label stating ‘top layer’

STEP 7

Once all 8 ‘top layer’ bags are installed, inspect to ensure they are secured tightly, with no meterial overhanging the unit frame

STEP 8

Close lid and secure with all three handles locked into position

Notes:

- To assist with longevity the filter bags can be periodically removed from situ and hosed down in a controlled area in line with your site specific silt management and environmental plan
- Additional replacement filter bags are available to purchase

Installing Basket Liners

STEP 1

Lay liner into basket ensuring correct orientation

STEP 2

Hook liner over lifting eyes on all four corners to position in place

STEP 3

Use supplied carabiner clips to secure straps to eyelets

STEP 4

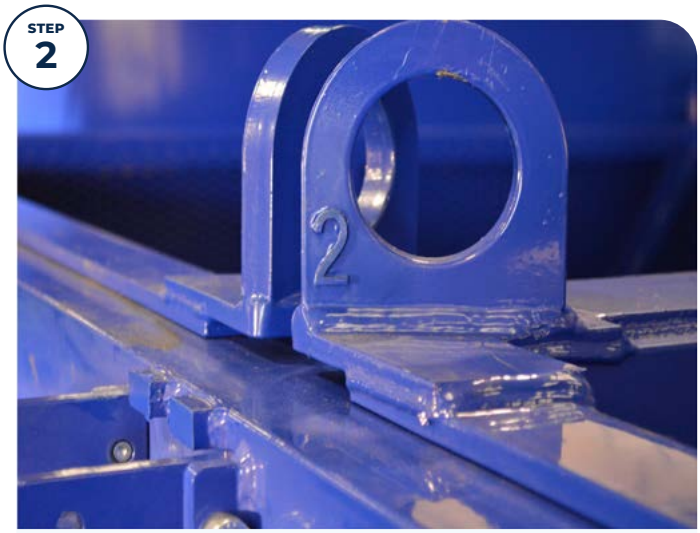
Ensure liner is secured in place before lifting into Filter Feeder™ unit

Lifting & Installing Filter Baskets

STEP 1

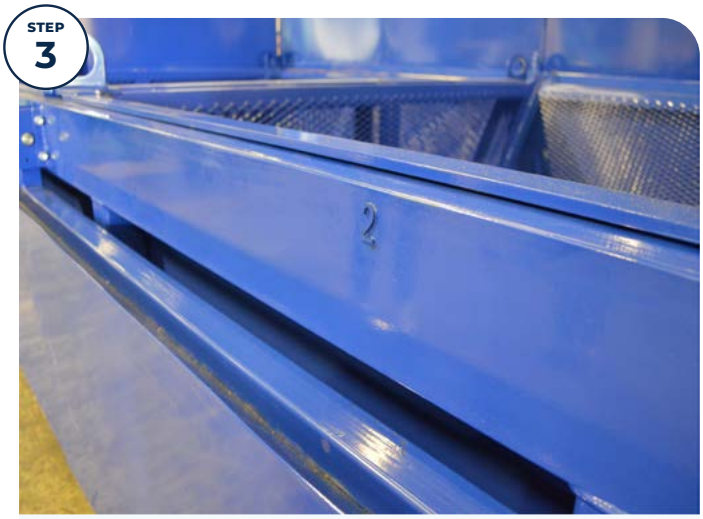
The filter baskets can be lifted using a 4 chain jib which must be attached to all four lifting eyes located on each corner of the basket prior to lifting

STEP 2



When installing baskets into the main body please ensure that basket 1 is always installed first and lifted into section 1 of the body at the front end of the unit and basket 2 into section 2 at the rear of the unit.

STEP 3



Ensure that splash backs are locked in the down position whilst lifting the baskets to and from the unit

Splash Back Screens

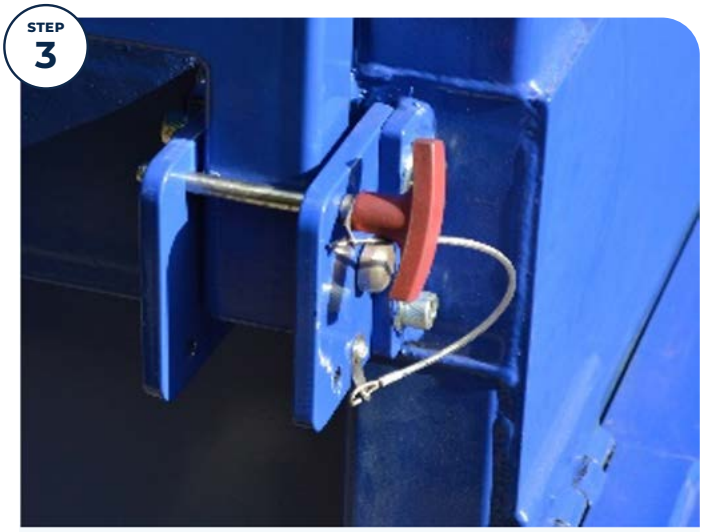
STEP 1

Splash back screens are located on either side of the unit.

STEP 2

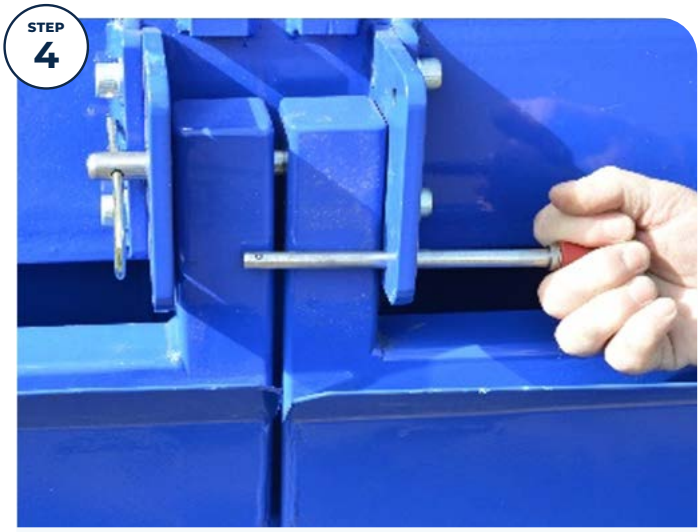
Splash back screens should be erected on the opposite side to tipping to minimise spilling around the unit, each section being a two man lift

STEP 3



The supplied locking pins should be used to secure the splash back in place along the full length, 3 pins in total to be engaged before use

STEP 4



Ensure that splash backs are locked in the down position whilst lifting the baskets to and from the unit

Tipping into the Filter Feeder™

▲ Example of how to set up the **Filter Feeder™** for a tip in from the right side of the unit. Tip contaminated water into the basket closest to the filter head frist.

- Please ensure that only road sweepings, gully sucking waste and pumped waste from de-watering exercises are processed through the **Filter Feeder™**. **No other waste should be deposited within the unit.**

- The bed of the **Filter Feeder™** consists of two adjacent pre-filter baskets. Tipping should be alternated between each basket to allow efficient drain down, visually **ensuring that at no time does the level of waste exceed 2/3 of the pre-filter basket.**

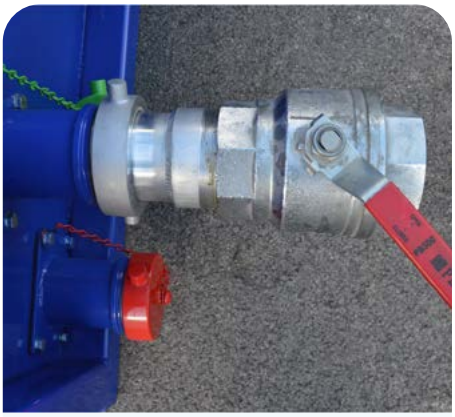
- It is considered best practice to drain down just the contaminated water from the sweeper via the integral hose allowing the sediment to build up on the sweeper. The solid waste can then be tipped from the sweeper on to a muck/ spoil pile and dealt with in line with your site specific silt management and environmental plan.

Discharging of water

- Water can be discharged from the **Filter Feeder™** via the top discharge outlet **(green)** located on either side of the filter head.
- A ball valve is supplied to allow for controlled discharge if required.
- A lay flat or similar can be attached to the valve and water discharged in line with your on site discharge permit and environmental plan (examples – balancing pond, chamber, gully pot with installed **Gully Guard™**)
- Discharged water should be regularly monitored
- During use, the bottom maintenance outlet caps **(red)**. should remain **closed.**

Top discharge outlet **(green)** Is used for water outlet.

Ball valve being installed on the top outlet.



Ball valve after installation

Emptying Filter Baskets

STEP 1

Remove filter baskets from body using jib and chain connected to all four corners

STEP 2

Place filter basket on a level surface at the designated muck/spoil area

STEP 3

Disconnect the chain on the two corners furthest from fork lift or other lifting plant

STEP 4

Gently lift the basket to create an angle for silt to be decanted

Notes:

- Silt to be dealt with in line with your site specific silt management and environmental plan
- Liners can be hosed down in a controlled area if required
- Additional replacement filter liners are available to purchase

Maintenance

- Maintenance caps are located on either side of the head (bottom cap) and at the rear of the unit, painted red and **must be closed** when the unit is in operation.
- The caps can be opened when the unit is non-operational to allow the flushing out of any trapped silts and sediments, consideration should be given to trapping these in a tray or liner on discharge.
- The unit can also be maintained by the sucking out of the filter head and unit body by a road sweeper or hydrovac.
- The frequency of maintenance will vary dependent on the level of use, construction phase, geographical location and season.

Bottom maintenance outlet **(red)** located either side of the filter head

Maintenance cap located at the rear of the **Filter Feeder™** Unit

Review of compliance requirements for the use of Filter Feeder by RSK Geosciences

Introduction:

We appointed RSK Geosciences to undertake a review of the “Filter Feeder” within its purpose as a dewatering and filtration system for sweeper waste arisings.

From the review a technical note was provided.

This Technical note aims to provide advice and guidance on the waste management legislation and compliance requirements that would likely need to be met for the use of the Filter Feeder on construction sites.

The full report can be found on our website or alternatively by scanning the QR code below

RSK GEOSCIENCES

View the RSK Geosciences Technical Note here:

www.forestgroupuk.co.uk/downloads-guides/forest-drainage-downloads-case-studies/

Guidelines to be considered for use within your site specific risk assessment and method statement.

- Locate on flat level ground that has been suitably prepared as a hard standing
- Locate in a suitable location free from underground voids, nearby excavations, and overhead obstructions/cables
- Only lift or manoeuvre using hiab and chains
- Forklift pockets are for manufacturing purposes only
- Locate in a securely fenced off area on site
- Clear access and egress routes for associated plant movement should be established, maintained, and made identifiable to all
- Appropriate site traffic management systems to be established
- Site Health & Safety protocols should always be adhered to
- Connecting hoses from pumps or to discharge points to be kept short and tidy
- Trailing hoses to be clearly marked and signposted wherever practical
- Caution should be taken when connecting and disconnecting hoses. Correct PPE to be worn
- Split levels, ramps and tipping platforms must be designed & constructed to correct specifications and routinely inspected
- Plant to reverse up to ramp or tipping platform following a 'reverse on, drive off' method
- Reversing must be kept to a minimum and under the guidance of a banksman at all times
- Vehicle or plant manoeuvring to be kept to a minimum
- No turning or traversing on ramps or platforms
- No reversing or manoeuvring on the platform whilst other personnel are present
- Handbrake/park brake to be applied and neutral selected before tipping of waste commences
- All plant to be equipped with reversing audio and visual signals
- Tipping equipment and plant to be operated by trained authorised personnel only
- Lift plan may be required
- Certified lifting equipment & accessories must be used to complete this operation
- No site personnel are permitted to be in the lifting zone when the load is being raised, lowered, or tipped on the ground. Access will only be permitted when the unit is on the ground
- Permitted waste tipping information should be signposted at the tipping location and all operatives inducted into the correct use of **Filter Feeder™** products
- **Filter Feeder™** to be visually inspected and routinely maintained in accordance with the manufacturer's instructions
- Do not overfill **Filter Feeder™** beyond manufacturers specification
- Spills to be contained, reported, and cleaned appropriately and immediately. Tipping operations to cease whilst remedial actions are undertaken
- Protective footwear, gloves, Hi Viz and eyewear must be used by all personnel in close proximity to tipping operations
- Site specific application may require protective hats and clothing – consult with site management
- Separate RAMS are to be additionally adhered to during maintenance – to be supplied and agreed prior to any maintenance

Forest Group UK

Customer Support & Technical Services

For technical assistance, operational support, replacement components, or any questions regarding the Filter Feeder system, please get in touch:

Phone: 01531 828960

Email: info@forestgroupuk.co.uk

To learn more about our smarter drainage solutions

Visit forestgroupuk.co.uk

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