

2.5 M³ ELCOROCK[®] FILLING FRAME & J BINS VISUAL INSPECTION CONDITION REPORT

A copy of this document must be sent with the hire equipment - original to stay at the branch.

VISUAL INSPECTION CONDITION (to be completed by Geofabrics' staff when checking out and checking in)	
Customer	
Dispatch/receipt	Out date: / / In date: / /
Branch location	
Expected return date	

Item Number	Number of items	Item name	Checked out	Checked in	Comments
1	1	Large rectangular base #			
2	1	Hopper column support post #			
3	1	Feeder hopper - including hose fittings			
4	2	J-Bin #			
5	1	Utility box			
6	1	Hose			
7	1	Clamp & pulley system			
8	3	Circular bag clamps			
9	2	Quick hitch attachments			

This equipment has received an in-service inspection and was found to have no obvious defects

CHECKED OUT BY

Name:

Signature:

Date : ___/___/___

CHECKED IN BY

Name:

Signature:

Date : ___/___/___

Comments/inspection results: _____

Dear Customer

- On receipt of this equipment, please check all equipment has been received, ensure your site staff read and understand the operating, maintenance and safety information and use the equipment in a safe manner.
- You are responsible for the safe operation of the equipment and the safety of your staff.
- At the conclusion of the use of the equipment, please clean the equipment, repack it for transportation and return it to Geofabrics.
- Please advise if there are any missing parts. All equipment usage must be in terms of Geofabrics' Equipment Hire Agreement. You will be charged for any damaged or missing components.

ELCOROCK® FILLING FRAME & J BINS - OPERATING & SAFETY INSTRUCTIONS

WARNING !

- Any alterations to this hire equipment may prove dangerous to the operator and will be in breach of the Equipment Hire Agreement.
- Service must only be performed by an authorised Geofabrics service organisation or representative.
- Please contact your nearest Geofabrics branch (contact numbers below) for the return of this equipment or servicing if it is found to be faulty.
- All hire related documentation, operating & safety instructions are available on the company website (www.geofabrics.com.au).



Guidelines for set up and filling of Elcorock® containers (2.5 m³ units) using ELCOROCK® Filling Frame & J - Bins.

Pre-operational considerations:

- Before setting up the ELCOROCK® Filling Frame & J-Bins, it is important that you read and understand the maintenance and safety precautions outlined below and in the Equipment Hire Agreement (Use and Maintenance).
- Contact your nearest Geofabrics branch (contact numbers below) if you do not understand any of the instructions in this document.

- To set up the ELCOROCK® Filling Frame & J-Bins and operate the equipment, operators must be in good physical and mental condition. Do not operate the equipment if on medication or under the influence of alcohol or drugs. Seek medical advice if unsure.
- As the filling and installation of ELCOROCK® products is considered a construction activity, the contractor using the hire equipment must prepare a site safety plan that incorporates the safe work methods for high risk work involving Geofabrics' equipment.

Safety Precautions and Working Techniques:

- Because the ELCOROCK® Filling Frame & J-Bins are large, heavy pieces of equipment and are used in conjunction with mobile plant and equipment, there is a risk of people or equipment being struck by mobile plant such as excavators/tractors/bobcats. Accordingly, all reasonable safety precautions must be exercised to reduce the risk of people being injured by equipment and mobile plant.
- Steel capped safety boots must be worn by all workers while operating or working near the ELCOROCK® Filling Frames and mobile plant.
- Always use personal protective equipment such as riggers gloves and safety eye wear with side protectors.
- All workers associated with the assembly and operation of the equipment must wear high visibility clothing (shirt or tabard) to increase visibility when mobile plant is in operation.
- When working outdoors for long periods, ensure all workers have applied sunscreen and are wearing broad brimmed hats.
- Establish an exclusion zone of at least two metres around the ELCOROCK® Filling Frame (hirer or their delegate to supervise) when an excavator or other piece of mobile plant is pouring sand into the ELCOROCK® Filling Frame.
- Never walk behind or around mobile plant without the mobile plant operator's permission/assent.
- Do not use ELCOROCK® Filing Frames or J-bins for any application other than its intended purpose.
- Do not abuse the ELCOROCK® Filling Frame or J-bins or any component of the equipment provided by Geofabrics in any way which may result in personal injury and/or damage to equipment.
- Check the condition of the ELCOROCK® Filling Frame, J-bins and components (including clamps, couplings, bolted components, valves, load bearing items and attachments) before each use for any damage. If the behaviour of any part of the filling frame or J-bin apparatus changes, check it immediately and return it to Geofabrics for service if necessary.
- Never modify the provided equipment in any way.

Site Conditions:

- Depending on the size of the project and number of units to be filled, careful planning of the site layout and logistics regarding filling and placement will enhance productivity and minimize the need for excessive handling or travelling.
- Consideration must be given to natural influences such as tide, wave and wind action and other site specific characteristics (other construction activity, public access, equipment etc). The ELCOROCK® Filling Frame & J-Bins should not be operated in conditions which will endanger the operator or other site personnel.
- Many installations of ELCOROCK® containers are constructed on comparatively soft sub-grades such as beaches and riverbanks. Care should therefore be taken that the filling area is level, firm and clear of debris. Failure to do this may result in the ELCOROCK® Filling Frame falling over. If ground stability changes due to repeated or prolonged use or changing environmental conditions, cease operations until appropriate remediation works are undertaken to provide ongoing stability.

SET UP & OPERATION OF THE ELCOROCK® FILLING FRAME & J-BIN

Introduction:

These guidelines are intended to provide an understanding of the mechanical filling of ELCOROCK® containers. Observation of some fundamental aspects can avoid on site frustration and enhance productivity.

You will need:

- ELCOROCK® containers (sold by Geofabrics).
- Free standing ELCOROCK® Filling Frame complete with 2 x J-Bin cradles (hired by Geofabrics).
- 2 shock absorbing retracting lanyards and safety harnesses.
- Backhoe or excavator with appropriate bucket size for sand delivery.
- 35 tonne excavator with suitable quick hitch attachment to match that of the J-Bin system.
- 2" high pressure water supply.
- Compressor or generator pump and compatible hose for pumping water.

ELCOROCK® Filling Frame:

The ELCOROCK® Filling Frame consists of a large rectangular base with a centre upright, which holds the hopper system in place. Two filling / placement cradles are placed on either side of the base and the hopper system is moved in a 180° arc to fill the respective containers.

The ELCOROCK® Filling Frame includes the water jetting fittings which allows for hydraulic compaction of the fill material within the container and helps prevent sand blockages. It also includes adjustable clamps to hold the container in place during filling.

Filling:

1. Assemble the ELCOROCK® Filling Frame incorporating a) filling frame base (image 1), b) feeder hopper column and support post (image 2) and c) hopper (images 3 &4) in the desired position ensuring it is level and stable. Attach the shock absorbing retracting lanyards to either side of the hopper.
2. Connect the water supply to the Feeder Hopper (image 5).
3. Install the J-Bins (images 6 & 7) into the filling frame base slots (image 8).
4. Ensure sufficient stockpile of sand is available for continued filling operation.
5. Fit the harness correctly for safe effective use as per manufactures instructions.
6. Remove one ELCOROCK® container from pallet and place in the J-Bin.
7. Attach clamp to top of container (image 9)and lift using Clamp & Pulley System (image 10) into position below the Hopper System as shown in image 11.
8. Slide the filling trunks of the ELCOROCK® over the Hopper System as far as it will go, i.e. the top edge of the bag should be within 25mm of the bottom of the Hopper.
9. Fix the adjustable clamps in place at the top of the Hopper System The container should now hang with the base approximately 10 mm above the bottom of the J-Bin.
10. Turn on the water jets.
11. Ensure that there is only one worker at any one time under the hopper manning the hose valves when sand is being deposited into the hopper. The worker must be wearing a hard hat and be positioned under the protection plate (extends approximately 280mm from side of hopper) whenever sand is being delivered to the hopper.
12. Begin to fill the container placing sand in alternate sides of the Hopper.
13. Ensure the container does not fold or crease during the placement of the first load of sand as this will reduce the fill volume in the container.
14. Fill the container with sand to within 150 mm of the top of the container.

15. Release the filling trunks from the Hopper System, roll them down and tie off using the polyester cord supplied with each bag, cover the holes on the trunks with silicon sealant.
16. Swing the hopper system over to the other J-Bin and repeat the process. Ensure that the ropes for pulling the hopper from either side are attached before assembling the hopper and frame. There is no need to stand on top of the J-Bins to move the hoppers around.
17. Push the rolled up filling trunks into the container and lace the opening using the polyester cord supplied, ensure a double reef knot is used to tie off the cord and cover knots with a generous layer of silicon sealant.
18. Ensure all workers are outside the 2 metre exclusion zone prior to removal of J-Bins (image 14).
19. Lift the J-Bin out of the ELCOROCK® Filling Frame and place the container into the structure (images 15 & 16).

Production Efficiencies:

As with any repetitive process, the key to productivity is organization. An organised site, well laid out with a machine operator and two assistants will comfortably fill 3-4 bags per hour at a sustainable rate. We suggest that the contractor should allow for 6 hours of production out of an 8 hour working day to allow for down time such as replenishing the stockpile, refuelling and general repairs and maintenance to the equipment.

Image 1



FILLING FRAME BASE

Image 2



**FEEDER HOPPER COLUMN
AND SUPPORT POST**

Image 3



**FEEDER HOPPER
ATTACHMENT POINT**

Image 4



FEEDER HOPPER

Image 5



HOPPER HOSE PROTECTION
PLATE BOLTS & WASHERS
WATER SUPPLY 2 INCH HOSE

Image 6



J-BIN'S "QUICK HITCH"
ATTACHMENT

Image 7



J-BIN

Image 8



J-BIN'S FIT INTO EACH SIDE OF THE BASE



CLAMPS



PULLEY SYSTEM



SET UP



Image 12



Image 13



Image 14



Image 15



Image 16

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