



# Storm water Filtration Chamber

# Inspection And Maintenance Guide

# **Important:**

- Inspection and maintenance to be performed by qualified personnel only.
- Helical filter replacement may require personnel properly trained for confined space activity in accordance with local and OSHA regulations.

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# Inspection and Cleaning Overview

The StormSafe-4C, like any other storm water remediation device, requires regular maintenance intervals to remain effective as a storm water filter. Since maintenance requirements and frequency are dependent on the pollutant load characteristics of each site, Fabco recommends a regular inspection and maintenance regime to maintain peak performance of the cartridge filters. As required, both the influent and effluent chambers should be cleaned of any collected oil, trash, debris and sediment that may inhibit filter performance.

### Recommended Cleaning Frequency

Site conditions will determine the required cleaning frequency to maintain peak performance of the StormSafe-4C treatment chamber. There is no universal rule to predict the optimal cleanout cycle for storm water filter systems; however locations with stabilized surface conditions will require less frequent cleaning than areas exposed to erosion or construction. Over a short period of time, regular inspection by maintenance personnel will dictate the appropriate cleaning frequency. For new installations, Fabco recommends at least two (2) inspections per year. Additional inspections are recommended following major rain events. Cleaning and filter replacement should be "as needed" based on these inspections. Fabco recommends an initial filter replacement frequency of once per year until sufficient historical data predicts otherwise.

# In Case of Spills

In the event of a spill, all inspection and cleaning operations should be aborted until trained HAZMAT personnel secure the jobsite.

### Included Reference Material

StormSafe-4C Detail (Figure 1), Maintenance Log Sheet

### Visual Inspection Procedure

Inspection and cleaning should be performed only after NO rainfall for at least 24 hours.

If working in the street, wear proper safety equipment and follow the local road safety rules & regulations. Begin by removing both the 36" manhole access cover located over the influent and effluent chambers of the StormSafe-4C. Allow several minutes for the system to vent.

<u>CAUTION</u>: Grates are extremely heavy. Some type of lifting mechanism is high recommended.

Visually inspect both chambers for heavy sediment, trash and debris loading that may limit or prevent water flow into the filter housing. A battery powered flashlight or droplight is recommended for thorough inspection.

Some telltale signs that cleaning or filter replacement is necessary are as follows:

Waterline marks less than 12-in below the top of the bypass weir.

Water level differential between the influent chamber and effluent chamber.

Obvious heavy loading of leaves, sticks or construction debris.

Record observations and comments on the maintenance log sheet. In addition, the use of digital photographs and/or sketches may be warranted to maintain the most accurate historical records.

### Cleaning and Filter Replacement

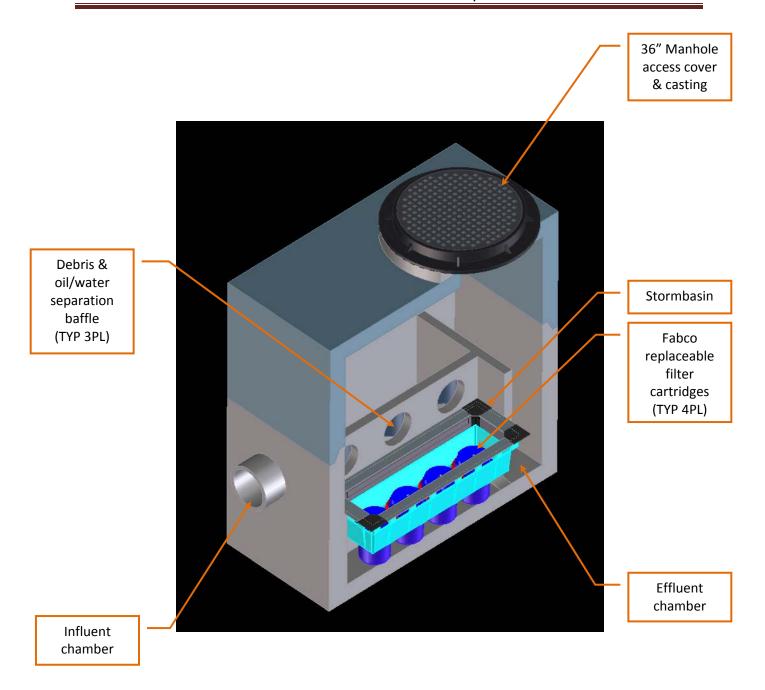
If cleaning or replacing a filter is deemed necessary, the following procedure is recommended:

- 1. Secure the worksite with the appropriate safety equipment in accordance with local and OSHA regulations.
- 2. Remove the 36" manhole access cover located over the influent and effluent chambers of the StormSafe-4C. Allow several minutes for the chambers to vent.
- 3. Perform an internal and external visual inspection of the vault's general condition including the access manhole cover and casting, as well as any exposed concrete surfaces. Record any visual anomalies such as cracks, gouges, hollows, excess wear and settling.
- 4. Without entering the vault, both the influent and effluent chambers can be cleaned using a typical vacuum truck or similar vacuum equipment with sufficient storage capacity.
- 5. Both the influent and effluent chambers are designed to accommodate standard suction hoses typical to vacuum equipment. Thoroughly vacuum liquids, debris sediment from both chambers.
- 6. If filter replacement is deemed unnecessary, reinstall the 36" manhole access cover. Clean the jobsite as necessary and record pertinent information on the attached "Maintenance Log Sheet" to complete the job.
- 7. If filter replacement is deemed necessary, vault entry is required and OSHA rules for confined space entry may be required. Check local regulations and proceed accordingly.
- 8. Removal of the filters is done from the influent chamber. Due to possible slippery floor conditions, care should be taken to avoid falls.
- 9. Use a ladder if necessary, enter the influent chamber and start by twisting and lifting one of the four cartridge filters in a **counter-clockwise** direction.
- 10. Repeat until all four filters have been removed, proceed to inspect and clean the cartridge openings to ensure correct fit for the new set of cartridge filters.

### Disposal

All removed water, oils, sediment, debris, trash and other accumulates collected in the StormSafe must be handled and disposed of in accordance with local, state and federal regulations.

Disposal considerations must be part of a well-planned and scheduled vault maintenance regime. Solid waste disposal can typically be coordinated with a local landfill, whereas liquid waste can be disposed of at either a wastewater treatment plant, or a municipal vacuum truck decant facility.



StormSafe-4C Detail (Figure 1)

Inspection and Maintenance Log-Sheet StormSafe 4C – Stormwater Filtration Chamber	
Maintenance Company Information	
Company Name:	
Onsite Technician:	
Contact Phone No:	
StormSafe 4C - Vault Information	
Date of Maintenance:	Fabco Vault P/N:
Vault Location:	
Water Depth (prior to maintenance):	<u>Comments</u>
Sediment Depth (prior to maintenance):	
Structural Damage:	
Maintenance Performed:	
Water level differential between chambers:	
Additional Work Required:	
Structural Repairs:	