



INSTALLATION INSTRUCTIONS

FOR SC-34 & SC-44 STORMCHAMBERS



STORMWATER RETENTION, DETENTION, CONVEYANCE AND REUSE

~ INFO@STORMCHAMBERS.COM ~

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BEFORE YOUR STORMCHAMBERS ARRIVE

MATERIALS NEEDED

- ☐ **drywall screws – 3” (75 mm)**
To secure overlap of chambers at their base.
- ☐ **crushed, washed, hard stone – ¾” – 2” (20 mm – 50 mm)**
For trench base and backfill above and around the StormChamber system.
- ☐ **schedule 40 or SDR 35 PVC pipes – 10” (250 mm)***
For connecting adjacent chambers.
- ☐ **schedule 40 or SDR 35 PVC pipes – 10” (250 mm)***
One for each cleanout riser.

EQUIPMENT NEEDED

- ☐ **long chain/cable/rope** (to remove oversized pallets from an enclosed truck)
- ☐ **wire cutters** (to cut bands securing chambers to pallets)
- ☐ **forklift** (with extended forks, to remove oversized pallets from truck)
- ☐ **excavator**
- ☐ **battery or power operated screw guns** (to screw together overlap of chambers at their base)
- ☐ **transit or laser**
- ☐ **stone bucket**
- ☐ **sawzall, router bit on a drill, or keyhole saw** (to cut chamber as needed)
- ☐ **light-weight, tracker dozer**
Not exceeding 1,100 lbs (500kg) per square foot to spread stone over chambers.
- ☐ **hand-operated compactor, vibratory roller, or tracked vehicle** (for compaction of soil backfill)
Not exceeding 1,100lbs (500kg) per square foot.

**Or as specified*

WHEN YOUR STORMCHAMBERS ARRIVE

UNLOADING THE PALLETS

Use a forklift or similar equipment. If not available, use a chain, cable or strap to drag the pallets off the truck. The chambers will not be damaged, but expect the pallet to break.

COUNT THE MATERIALS

Check your list of materials and make sure the number you have matches your purchase order. The list should include, but may not be limited to, the following:

- ☐ Start Chambers
- ☐ Middle Chambers
- ☐ End Chambers
- ☐ Chambers Closed at Both Ends
- ☐ SedimenTraps™
- ☐ Non-Woven Filter Fabric
- ☐ Stabilization Fabric
- ☐ Scour Protection Mat
- ☐ Manhole Frames and Covers

Check the materials for damage. **CONTACT STORMCHAMBER IMMEDIATELY IF ANY MATERIALS ARE MISSING OR DAMAGED.** We maintain pictures of your pallets as they appear when loaded for delivery.

NOTE: Do not be concerned if the narrow shipping strips at the end wall of the chambers appear damaged. You remove them as part of the installation.

!!HEAT ADVISORY!!

In hot weather conditions, if possible, store all chambers and backfill stone in a shaded area until they are ready to be installed. Our recommendation is that the system be laid out and all pipes connected the day prior to backfilling with stone. **Backfilling of stone should be restricted to cooler morning periods only.**

TRENCH PREPARATION

Make sure there's no forecast of rain between when you excavate the trench and when you cover the stone above the chambers with filter fabric.

EXCAVATE THE TRENCH

Make sure the bottom of the trench is level. There should be enough room for the StormChamber system, plus at least one foot of border stone. If you can't excavate from outside the trench, back the excavator out as you excavate to avoid compacting the soil.

EXCAVATE FOR SEDIMENTRAPPS*

Excavate a hole approximately 5' deep by 5' wide by 5' long wherever SedimenTraps are specified. SedimenTraps must be aligned directly below the riser pipe. Place at least 6" of stone at the bottom of each excavated hole.

LINE THE TRENCH WALLS WITH FILTER FABRIC

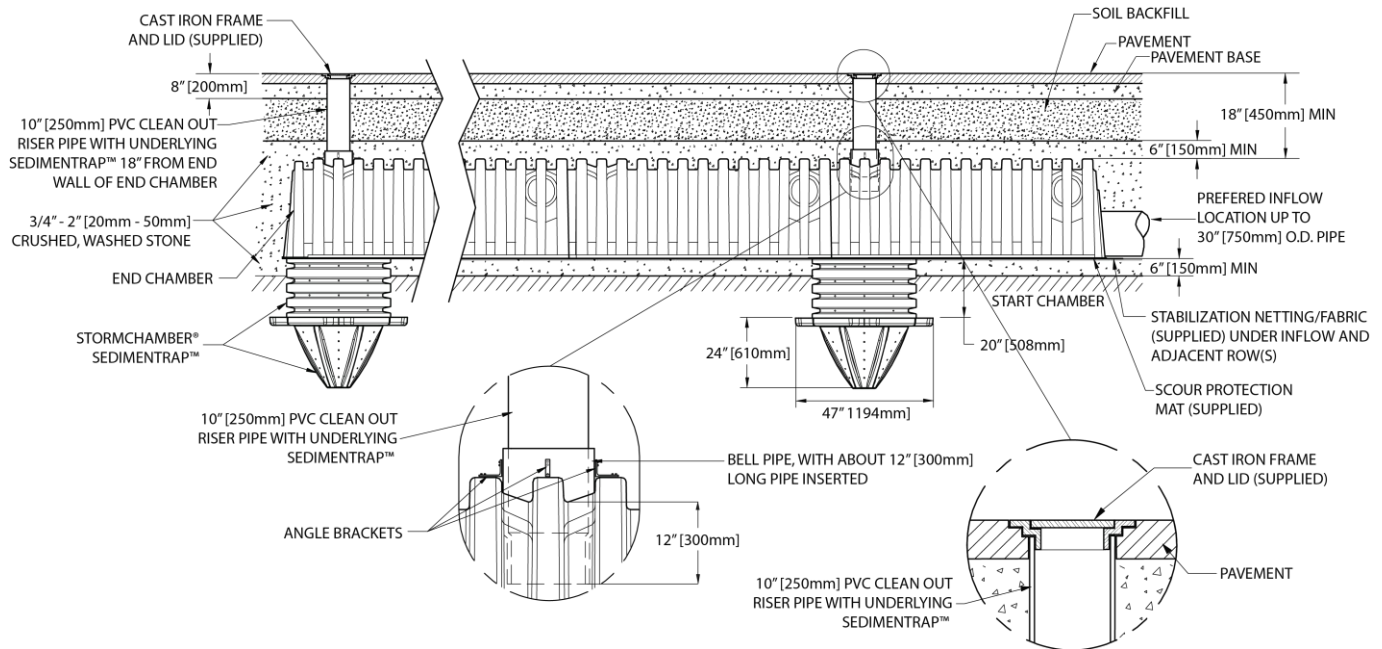
Line the trench walls (not the trench bottom) with provided StormChamber filter fabric. Make sure the filter fabric overlaps by at least two feet.



* *SedimenTraps must be centered below the top portal of the chamber/riser pipe.*

INSTALLING THE STORMCHAMBER SEDIMENTRAP

Most StormChamber systems include SedimenTraps to capture and help remove sediment.



PLACE THE SEDIMENTRAP

Place a SedimenTrap in each of the holes. Only the top corrugation should be exposed above the height of the stone base.

SECURE WITH STONE

Fill any extra space around the SedimenTraps with $\frac{3}{4}$ " – 2" crushed, washed, hard stone.

ADD HARD STONE

Cover bottom of trench with $\frac{3}{4}$ " – 2" crushed, washed, hard stone, to the depths specified.

LEVEL IT OUT

If necessary, you can use a light-weight tracked dozer to level the stone. Dozer should not exceed 1,100 lbs (500kg) per square foot to avoid soil compaction.

PLACE STABILIZATION NETTING/FABRIC

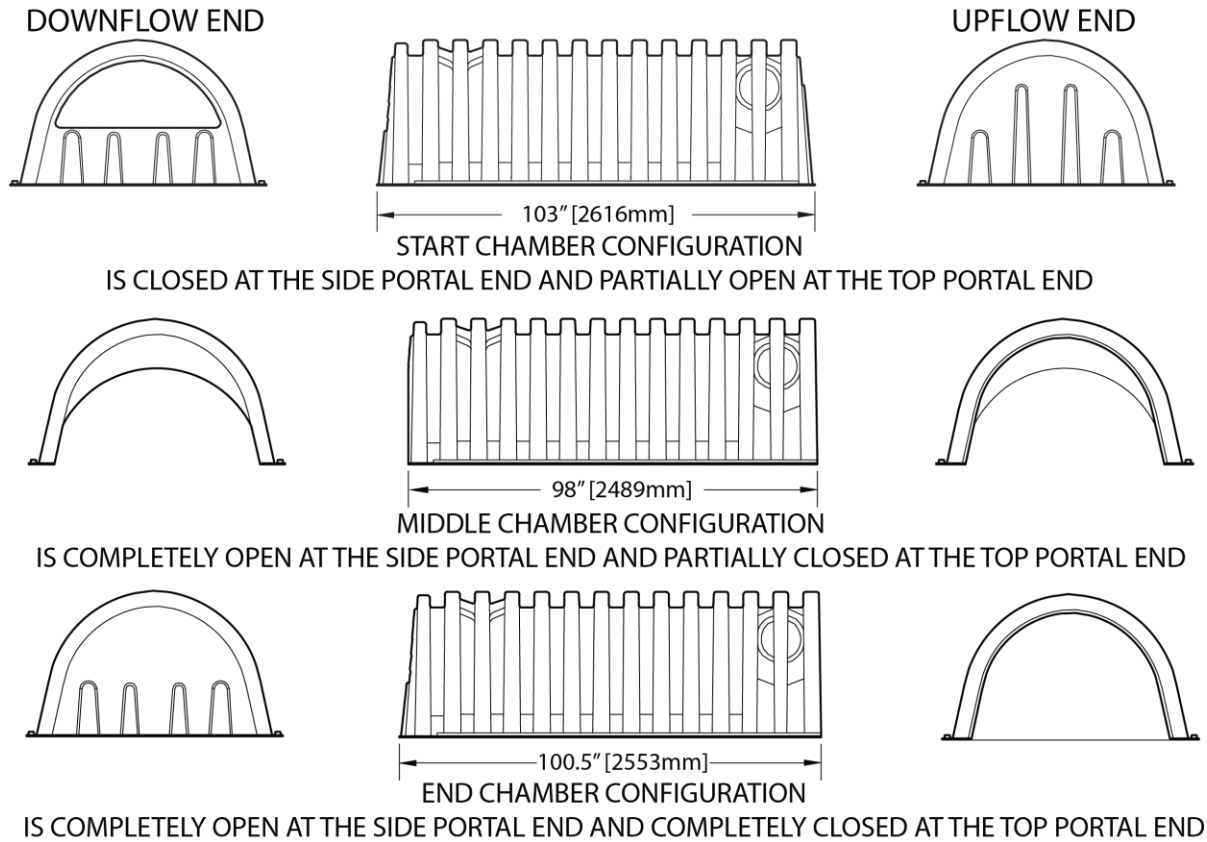
Place stabilization netting underneath the entire row(s) of StormChambers receiving inlet storm drain pipes. Cut a hole so that the netting fits snugly under the top corrugation.

PLACE SCOUR PROTECTION MAT

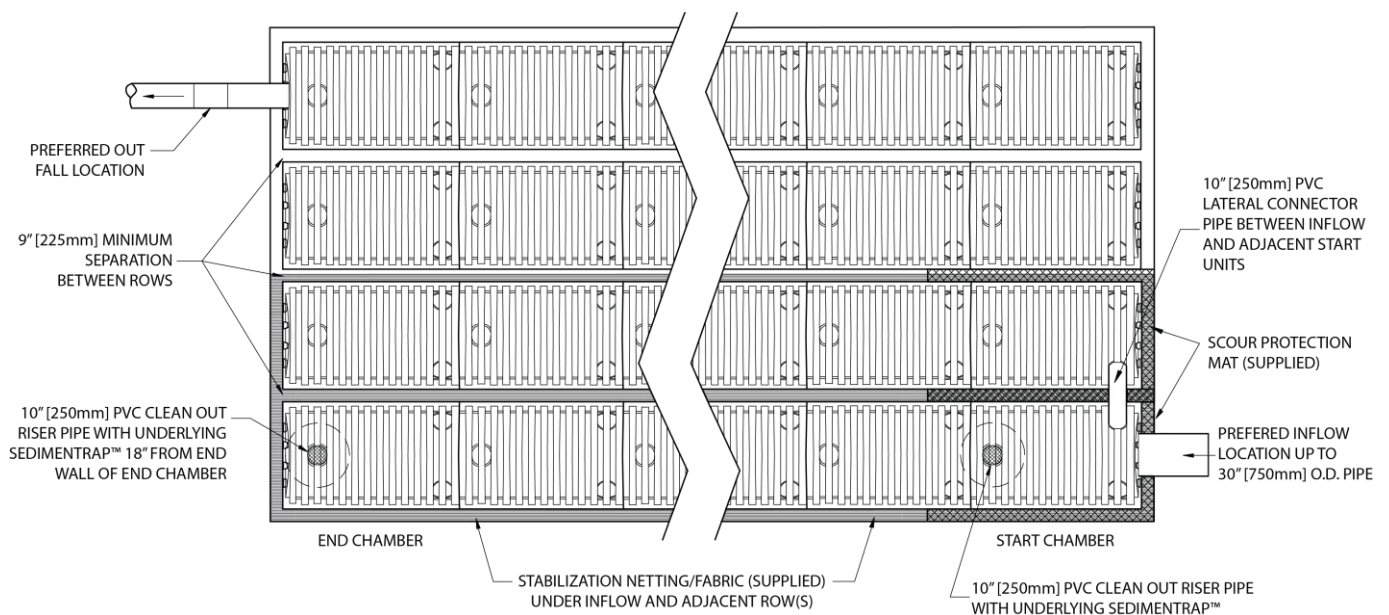
Place scour protection mats under each chamber receiving storm water inflow. Align to extend beyond the edges of the chamber that is laid over the mat. Cut a hole so it fits snugly under the top corrugation of any SedimenTrap that may be located under the chamber.



PLACING THE STORMCHAMBERS



STANDARD EXAMPLE CONFIGURATION



CUT OFF SHIPPING STRIPS

Cut off the narrow shipping strips at the end walls to allow the chambers to overlap.

PLACE CHAMBERS

Place all Start Chambers first. Make sure the closed ends of the Start Chambers are at least 1 foot from the facing trench wall. Next build the chamber rows by placing the first rib of a Middle Chamber over the last rib of each Start Chamber. Extend all rows equally rather than one at a time. Finish each row with an End Chamber placed at least 1 foot from the end of the trench.

SCREW CHAMBERS TOGETHER

As you overlap the first rib of the next chamber over the last rib of the previous chamber, screw the chambers together at the foot of the overlapped ribs with 3 inch drywall screws. Include one screw on each side, making sure to bring the chambers close enough so no stone can pass through during the backfilling process.

To minimize installation time, begin placing pipe and backfilling as the remaining chambers are being placed.



INSTALLING PIPES

CUT OUT THE SIDE PORTAL HOLES

After placing the Start Chambers, cut open the side portals along the indentation guides for the lateral connecting pipes, as specified.

INSERT ROW CONNECTING PIPES*

Mark the midpoints of each connecting pipe and insert them between the adjacent chambers so the midpoint is centered between the two chambers. The connecting pipes must be inserted about 6" into each chamber.

CUT HOLE FOR RISER PIPES*

Cut out the top portals along the indentation guides as specified. **

INSTALL CLEANOUT RISERS*

Install the cleanout risers using 10" PVC pipes, and manhole frames and lids (supplied).



**If there's more than ½ inch gap between the pipe-hole and the pipe, cut an "X" sized just short of the hole diameter in one or more pieces of filter fabric and place it over the pipe hole before inserting the pipe.*

***SC-44 lacks a defined top portal. The hole should be centered over the SedimenTrap and sized for the riser pipe.*

BACKFILLING THE SYSTEM

BACKFILL THE HARD STONE

Deposit the ¾" – 2" crushed, washed, hard stone directly along the centerline of the StormChamber rows. Level the hard stone with a tracked vehicle not exceeding 1,100 lbs (500kg) per square foot. Make sure to keep at least 6" of stone under the tracks at all times.

COVER STONE WITH FILTER FABRIC

Cover the backfill stone with filter fabric, making sure to overlap sheets by at least 2'.



BACKFILL WITH SOIL OR AS SPECIFIED

Backfill the installation with soil and compact in lifts 6 to 8 inches high to at least 95% Standard Proctor. Make sure the pressure of the tracked dozer does not exceed 1,100 lbs (500kg) per square foot.

Start at one corner of the system when grading lifts and keep at least 1 foot of under the tracks at all times.

After compacting the backfill and setting the final grade, avoid traversing over the area with heavy equipment until paved.

**IMPORTANT:**

These instructions assume acceptable construction procedures, and that trucks do not exceed specified DOT load limits. Uncustomary loads or improper load distributions in vehicles may require additional cover. Contact StormChamber for installation under abnormal conditions. Installations not in compliance with these instructions will void the warranty. Contact StormChamber for technical assistance at 1.877.426.9128 or email us at info@stormchambers.com.

STORMCHAMBER LIMITED WARRANTY

HydroLogic Solutions will warranty the structural integrity of each StormChamber unit in accordance with the installation instructions and is warranted to the original buyer against defective materials and workmanship for one year from the date of purchase. It is the responsibility of the buyer to inspect the StormChamber units prior to installation and to inform Hydro- Logic Solutions of any defect prior to installation. *HydroLogic Solutions will only be responsible for supplying replacement units. HydroLogic Solution's liability specifically excludes the cost of removal and/or installation of the units and shall not exceed the price or charge for its products.*

There are no other warranties with respect to the units, including no warranties of merchantability or fitness for a particular purpose. *This warranty does not extend to incidental, consequential, special or indirect damages. HydroLogic Solutions shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, over- head costs, or other loss or expenses incurred by the buyer.* Specifically, excluded from warranty coverage is damage to the units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the units, improper construction protocols, installation of the units not consistent with our installation instructions, placement by the buyer of improper materials into the system, damage due to crushing by heavy equipment weighing in excess of what is listed in the installation instructions, failure to maintain the minimum ground covers as set forth in the installation instructions or any other event not caused by HydroLogic Solutions. *HydroLogic Solutions shall not be responsible for any loss or damage to the buyer, the units, or any third party resulting from its installation or shipment. The buyer shall be solely responsible for ensuring that the installation of the system is completed in according with the installation instructions, and will abide by all applicable laws, codes, rules and regulations.*

Inspection of shipment must occur within 5 days of receipt of StormChamber units and written notice of alleged defect must be provided in detail. Failure to advise us of defects within this allotted period will constitute acceptance of the shipment.

This warranty shall not apply to any party other than the original buyer. Furthermore, no Company representative or employee has the authority to modify or change this warranty in any manner, nor does this warranty apply to shipping or in transit damage.

The StormChamber is protected by the following U.S. Patents: 7300226B1; 6612777B2; 6719490B2; 6994490B2. Other U.S., foreign and Canadian Patents Pending.

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