StormBasin®

modular stormwater filtration system

Site Survey instructions

This section will assist you in the simple process of selecting the appropriate StormBasin size and model for your specific application. It begins with a brief over view of catch basin types and terminology followed by a quick look at the StormBasin; how it's positioned, system components and finally how to do the survey.

The StormBasin Stormwater-filtering system is designed to fit into an existing parking lot or roadside storm sewer commonly called a "Catch Basin". The StormBasin can be adapted to fit into catch basin designs that feature 1) a flat Grated opening, or 2) a Combination design featuring a flat grate with an open curb box.

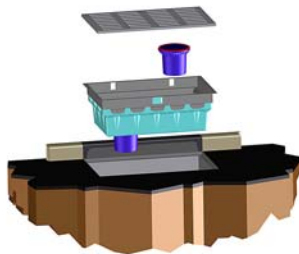Flat Grate   Combination

Both catch basin designs feature a frame with a metal grate and a masonry or concrete underground vault.

The metal frame/grate supports traffic loads and protects the storm water system by keeping

large objects out of the vault. The grate is kept in place by a frame, which can be made out of cast iron or metal angle irons inserted directly into concrete. The vault below the grate collects and temporarily stores surface water runoff before directing it into the storm water system.
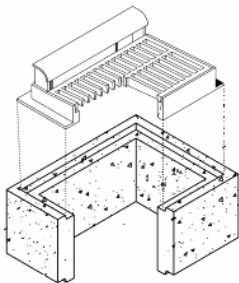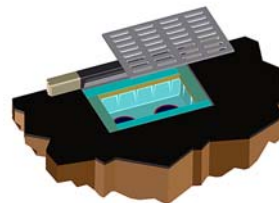
The StormBasin filter is suspended from the grate frame down inside the opening to the vault intercepting and filtering the surface runoff of impurities, sediments and floating debris before it passes into the storm water system.
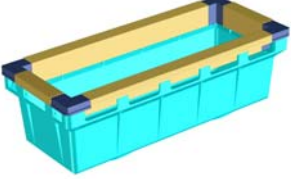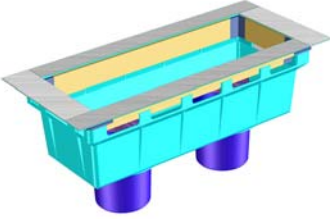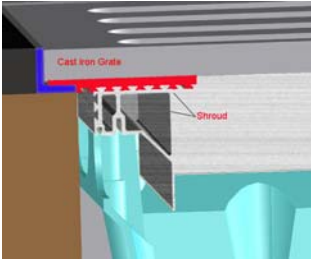
Lift grate and seat StormBasin on frame

Replace grate on frame.

The standard StormBasin is composed of 3 parts :

	The plastic basin collects the runoff water and provides storage volume for debris and sediments. The basin includes 1 or 2 mounting ports for filter cartridges and emergency by-pass ports to prevent flooding. The by-pass ports are protected by the shroud, which helps keep the captured materials from flowing out during by-pass operation

		A metal mounting flange, which is adjustable and available in various configurations to fit the filter to the grate frame as it hangs down inside the vault

	Filter /media cartridge(s) that is / are inserted into the floor of the basin and protrude out the bottom approx 9"

Pre-Installation Survey:

Prior to ordering, the perspective catch basin must be surveyed to determine the drain type (Flat or combination), the depth to the bottom of the vault, grate dimensions (Width x Length x Thickness) and available "Free Space".

1. The drain style is easily observable. StormBasin fit Flat grate or combination style storm sewer drains

2. The depth should be measured from the bottom of the frame to the vault floor. Approximately 30" is required.

3. When measuring the grate be sure to measure the grate thickness as this can interfere with the installation. Due to road load requirements, catch basin grates, especially the larger sizes are cast with deep ribs extending downward below the mounting frame. To accommodate this ribbing, the Fabco StormBasin can be equipped with deep drop

flange mounting kits. For Flat grates use kit "C" for Combination style drains use kit "E". For Steel grates or grates with even thickness use kit "A".

4. As the StormBasin hangs down under the grate, the plastic basin occupies most of the available volume or space within the first 12" of depth. We call this "Free Space", in other words space that can be occupied by the StormBasin without interfering with the grate and without contacting objects protruding from the vault into the free space. Examples of objects that can protrude into the space and potentially contact the basin body are: the frame or ledge that supports the grate itself, drainage pipes, masonry ledges, and climbing steps.
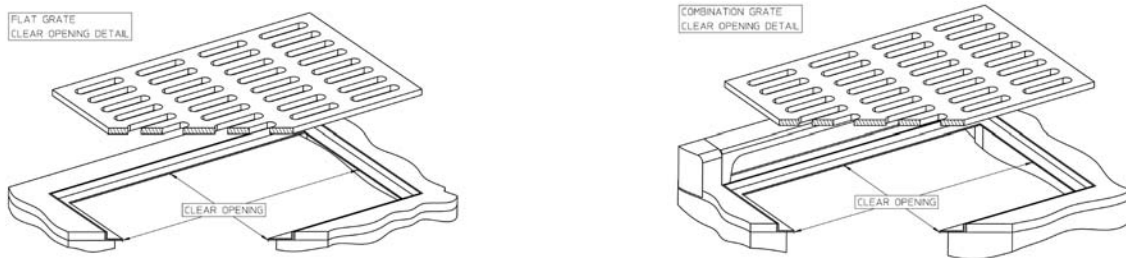
Finally, during the survey procedure, examine the catch basin vault. Fabco recommends cleaning the catch basin vault to remove any collected sediments, trash or other debris, prior to installation. And don't forget "Free Space" the walls of the chamber should be relatively flat and straight with little or no protrusions from tree roots, drainage pipes, loose bricks or other objects especially within the first 12 to 24 inches.

When you have recorded all the pertinent measurements, refer to the StormBasin sizes & capacities table in the brochure. To select the appropriate size:

1) Select one of the 3 width ranges that covers the actual width you measured during the survey
2) Move down the width column from top to bottom until you locate a length range that covers the length you measured.
3) The intersection of the Width column and the Length column defines the precise StormBasin that will fit your grate / Open Space measurements
4) Once you have selected the StormBasin size, select one of the 3 standard mounting "flange" styles defined below the size selection chart.

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StormSack sizes & capacities

fabco technology

The StormSack is available in 18 basic sizes which can be adjusted to a specific size using the adjustable flange. To select the correct product for your needs the size should be taken from the catch basin grate. Example; a 24" x 48" grate would require a 9748-1 part number, then add the installation kit letter for a deep flange "C" therefore your final part number would be 9748-1C.*

	Width from 21" to 24"		Width from 25" to 30"		Width from 31" to 36"	
Length from 27" to 31"	Part Number	9748-6X	Part Number	9749-6X		
	Sack size:	18" x 24"	Sack size	22" x 24"		
	Filtered flow rate	808 gpm	Filtered flow rate	937 gpm		
	Bypass flow rate	300 gpm	Bypass flow rate	300 gpm		
	Debris capacity	2.2 cubic ft	Debris capacity	2.8 cubic ft		
Length from 32" to 35"	Part Number	9748-5X	Part Number	9749-5X		
	Sack size:	18" x 28"	Sack size:	22" x 28"		
	Filtered flow rate	918 gpm	Filtered flow rate	1059 gpm		
	Bypass flow rate	300 gpm	Bypass flow rate	300 gpm		
	Debris capacity	2.6 cubic ft	Debris capacity	3.3 cubic ft		
Length from 36" to 38"	Part Number	9748-4X	Part Number	9749-4X		
	Sack size:	18" x 32"	Sack size:	22" x 32"		
	Filtered flow rate	1029 gpm	Filtered flow rate	1182 gpm		
	Bypass flow rate	338 gpm	Bypass flow rate	338 gpm		
	Debris capacity	3.0 cubic ft	Debris capacity	3.9 cubic ft		
Length from 39" to 43"	Part Number	9748-3X	Part Number	9749-3X	Part Number	9750-3X
	Sack size:	18" x 36"	Sack size:	22" x 36"	Sack size	28"x 36"
	Filtered flow rate	1135 gpm	Filtered flow rate	1302 gpm	Filtered flow rate	1548 gpm
	Bypass flow rate	338 gpm	Bypass flow rate	338 gpm	Bypass flow rate	451 gpm
	Debris capacity	3.4 cubic ft	Debris capacity	4.4 cubic ft	Debris capacity	5.8 cubit ft
Length from 44" to 47"	Part Number	9748-2X	Part Number	9749-2X	Part Number	9750-2X
	Sack size:	18" x 40"	Sack size:	22" x 40"	Sack size	28" x 40"
	Filtered flow rate	1245 gpm	Filtered flow rate	1422 gpm	Filtered flow rate	1688 gpm
	Bypass flow rate	376 gpm	Bypass flow rate	376 gpm	Bypass flow rate	489 gpm
	Debris capacity	3.8 cubic ft	Debris capacity	4.9 cubic ft	Debris capacity	6.6 cubic ft
Length from 48" to 52"	Part Number	9748-1X	Part Number	9749-1X	Part Number	9750-1X
	Sack size:	18" x 44"	Sack size:	22" x 44"	Sack size	28" x 44"
	Filtered flow rate	1353 gpm	Filtered flow rate	1540 gpm	Filtered flow rate	1828 gpm
	Bypass flow rate	376 gpm	Bypass flow rate	376 gpm	Bypass flow rate	489 gpm
	Debris capacity	4.2 cubic ft	Debris capacity	5.5 cubic ft	Debris capacity	7.3 cubic ft

Width from 31" to 36"

Custom sizes available ask for details

Flow rates calculated on a 15" depth replaceable bag double the flow rates for 30"depth bag

Replaceable oil boom available on all StormSack configurations

Flat adjustable flange

The StormSack flat adjustable flange is designed for drop inlets with flat grate covers. It offers adjustment of up to 4" when installing in a catch basin.

Type A

Deep adjustable flange

The StormSack deep adjustable flange is designed for drop inlets with grate covers that are not flat on the under side. The deep flange offers similar adjustment as the flat flange.

Type C

Deep adjustable flange open curb

The StormSack deep adjustable flange open curb is designed for combination drop /open curb inlets. The rear deflector redirects flow from the curb opening into the StormSack.

Type E

* The measurement guidance is based on the assumption of a 1" ledge around the catch basin frame.