

StormBasin™ StormSack

Flange Mounting System

The StormBasin and StormSack are storm water filtering systems designed to fit into an existing parking lot or road side storm sewer drain, commonly called a “Catchbasin”.

The StormBasin features a rigid plastic basin or tub to collect and focus the water entering the drain to 1 or 2 filtering cartridges mounted on the bottom surface of the basin. The cartridges can be configured to treat: Trash & debris, sediments, HV metals, bacteria, Oils & grease and many other identified pollutants.

The StormSack replaces the plastic basin with a woven Geotextile bag and does not utilize filtering cartridges. Instead the StormSack uses the inherent sieving ability of the woven Geotextile material to captures gross solids as well as fine sediments. However both the StormBasin and the StormSack use the same adjustable mounting system. This mounting system provides the installer with a very secure mount while allowing some on-site adjustability to account for slight problems in casting quality, obstructions or protrusions into the underground vault or even gross measurement errors.



The Frame:

The mounting system begins with a frame composed of straight lengths of aluminum extrusion joined at the corners by plastic corner pieces. The resultant structure is extremely strong and rigid while remaining very light in weight. These custom extrusions also include a series of parallel, dove-tail shaped rails or ways formed into the top surface. During the installation process these dovetail ways are used to attach the mounting flanges to the frames.

The picture at the right shows the StormBasin complete with the aluminum mounting frame.



The picture to the left shows the StormSack, the aluminum frame and some of the other mounting hardware.

The Flanges:



Both the StormBasin and StormSack are designed to be installed beneath the iron storm sewer grate capturing the water as it flows off the surrounding surfaces. In this position the grate and the StormBasin or StormSack share the same mounting ledges.

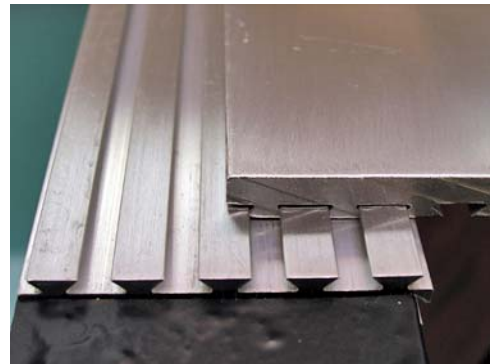
To adapt the units for

- a) Number of ledges (2, 3 or 4)
- b) The grate design
- c) The storm sewer style (drop inlet or combination)

Fabco offers a series mounting flange kits. One kit is supplied with each unit ordered.

Adjustable Dovetail ways:

All Fabco mounting flange kits attach to the aluminum frames using the dovetail ways. Each mounting kit is provided pre-cut to size and ready for installation. The Flange pieces are attached to the frame by aligning the dovetail ways with the corresponding cutouts on the bottom of each of the Flange pieces. By selecting dove tails either closer to or further away from the inner edge, the position of the mounting Flange can be adjusted in precise $\frac{1}{2}$ " increments up to 3". The picture below shows the StormBasin with 3-Flanges installed: Back, left and right. The Flanges should be adjusted so that they sit on the ledges that support the grate. In other words, the StormBasin or sack occupies the "**FREE SPACE**" between and below the support ledges.



Available Flange Kits:

Fabco offers 3 standard mounting kits: A, C & E.

Type A:

Fits Flat Storm sewer drains (drop inlets) that are flush with the surrounding surfaces (no curb boxes)

Grates are supported on a frame using 4 ledges

Grate material is typically welded steel although some smaller cast Iron grates can also fit into this category. Refer to the Syracuse Castings Website <http://www.syracast.com/> > New York State Casting > Drainage grates; Reticuline grates are probably the most recognized design.



Key attribute – Grate thickness remains consistent without protruding ribs. Grates may have locking tabs! Also, Type A flange kits require the least amount of depth below the grate.

Type C:

Fits Flat storm sewer drains (drop inlets) that are flush with the surrounding surfaces (no curb boxes) Grate material is typically Cast Iron.

Grates are supported on a frame using 4 ledges. A good example of this type of grate/frame can be viewed on the Neenah Foundry website

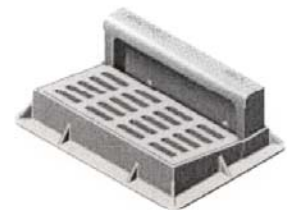
<http://www.neenahfoundry.com/c/pdf/catchbasininlets.pdf> refer to model R-3227 Expressway Inlet.

Key Attribute – Cast iron grates are usually heavily ribbed support traffic weights. Normally there is a flat bearing surface around the perimeter of the grate that sits on the frame ledges. Beyond the flat supporting surface, ribbing extends downwards across the entire surface of the grate until it intersects the flat support surface on the opposite side. To allow these ribs to extend downwards, the StormBasin flanges must be “Z” shaped to move the StormBasin or StormSack down so that the ribs do not contact with the mounting flanges.



Type E:

Fits Combination or grate with rear curb box style storm sewer inlets. Good examples can be viewed on the Neenah Foundry Website: <http://www.neenahfoundry.com/c/pdf/catchbasininlets.pdf> View Neenah style R 3290



The Type E kit assumes that the Grates are supported on 3-ledges only: Left, Right and Front. The Type E kit includes a Rear rubber flap assembly that attaches to the frame and extends at an angle into the rear curb box. The rubber flap can be trimmed to fit. The purpose of the rubber flap is to direct water entering the rear box into the StormBasin and StormSack unit.

Key Attribute: Storm sewers grates can be any material with or without ribs. Locking mechanism can be accommodated. In some cases a rear bar may extend across the mouth of the open box, which may or may not interfere with installation. Contact Fabco Industries for instructions.

