

MULTI STAGE Inlet Filters

WATER QUALITY ECO-FRIENDLY SUSTAINABLE

Proven Stormwater Treatment

Grate Inlet Skimmer Box[™], Standard Capacity Curb Inlet Basket[™] and High Capacity Curb Basket[™] multi-stage filtration systems allow inflow stormwater to filter through a patented series of varied sieve size screens which capture and retain a range of pollutants such as foliage, trash and sediment. The GISB[™], HCCIB[™] and CIB[™] are comprised of UV-coated, marine-grade fiberglass and stainless steel screens. These inlet filters have a lower lifetime cost per unit with no filter replacement costs and quick service times at an average of 15 minutes or less.

Benefits:

- Will not impede inlet water flow
- Captures hundreds of pounds of debris and sediment
- Multiple sieve size screens optimize filtration and water flow
- Easy vacuum truck servicing
- Bypass openings prevent clogging
- Minimal space requirements
- Multi-stage treatment system
- Full capture for trash TMDL's







INLET FILTERS



CIB | HCCIB

The Standard Capacity Curb Inlet Basket (used in shallow catch basins) and High Capacity Curb Inlet Basket (used in deep catch basins) are specialized inlet filters used for curb inlets where the only access element is a manhole. Both units are made of UVcoated, marine-grade fiberglass and stainless steel to ensure longevity and durability. Both inlet filters are unique for their shelf system which directs stormwater flow into the filter positioned directly under the access manhole. This system can be manufactured to any size and style of catch basin. The Standard Curb Inlet Basket and High Capacity Curb Inlet Basket are multistage filtration systems that can capture a variety of pollutants and debris during a storm event. Under high volume flows, water can bypass the filtration system by flowing past the filter and into the catch basin.



Standard Capacity Curb Inlet Basket (Shallow Catch Basins)

Operation Summary

- Stormwater carrying debris and pollutants enters through the curb inlet.
- An adjustable throat width funnels water to the weir. The immediate drop in the throat elevation prevents head loss through the inlet This allows sediment to collect along the incoming side of the weir.
- The water flows over the weir and into the filtration basket, filtering out trash, sediment and hydrocarbons.
- Filtered water leaves the basket and enters the catch basin. The position of the curb inlet basket high in the catch basin allows for captured debris to dry between storm events and avoid restriction to up-stream pipes.



High Capacity Curb Inlet Basket (Deep Catch Basins)

BIORETENTION / BIOFILTRATION





INLET FILTERS



Grate Inlet Skimmer Box

The Grate Inlet Skimmer Box (GISB) is a specialized inlet filter used specifically for grated catch basins. The unit is made of marine-grade fiberglass and stainless steel to ensure longevity and durability. During a storm event, all incoming stormwater passes through the internal skimmer tray and into contact with a StormBoom. Stormwater and solid material then fall into the lower section of the skimmer box where small sieve sized filters capture and retain all solids. Turbulence deflectors within the filtration box act to calm the water and allow for a greater removal efficiency. Treated stormwater is thus able to pass into the catch basin system allowing the filters to dry after each storm event.

StormBoom Media

Type 1 Hydrophobic Treated Cellulose

Wide spectrum absorbent with large sieve covering. Capable of absorbing chemicals other than hydrocarbons.

Type 3 50 - 50 Types 1 & 2 Blend

Half & half blend of types 1 and 2 with a large sieve size covering. This media offers wide spectrum absorption with an emphasis on hydrocarbons.



Operation Summary

- Stormwater enters the inlet and passes through a StormBoom and into the lower filtration chamber.
- The water level increases to a level adjacent with the medium size sieve screens and turbulence deflector.
- During high flows, the water level rises adjacent to the coarse size screens above the turbulence deflectors.
- During extreme flows, water bypasses filtration by through skimmer protected openings at the top.
- Collected debris is suspended and stored in a dry state above static water level until removed during service.

Type 2 Melt Blown Polypropylene

A non biodegradable large sieve size covering that is limited to only hydrocarbon absorption.

Type 4 Polymer Crumb Filler

A polymer filler with a fine sieve size covering that will not absorb water, can float indefinitely and is non biodegradable.

BIORETENTION / BIOFILTRATION

INLET FILTERS

SIMPLE TO SERVICE.





CIB | HCCIB Maintenance

Heavy equipment is not required and use of a vacuum truck is optional when servicing the CIB or HCCIB. Whether servicing manually or with a vacuum truck, the 15 minute cleaning time facilitated by the shelf system eliminates the need for confined-space entry.

Manual Servicing Procedure

- Remove the manhole cover.
- Remove filtration basket either by hand or with manhole hook tool.
- Cut zip ties, remove StormBoom and dispose.
- Attach new StormBoom with zip ties.
- Brush filtration basket screens clean if necessary.
- Replace filtration basket and replace manhole cover.

Vacuum Servicing Procedure

- Remove the manhole cover.
- Cut zip ties, remove StormBoom and dispose.
- Suction out debris from filtration basket with vacuum truck hose
- Attach new StormBoom to skimmer tray with zip ties.
- Replace filtration basket and replace manhole cover.



GISB Maintenance

It is recommended to service the GISB quarterly. The maximum flow capacity of the unit will be restored after servicing. The unit can easily be serviced manually or with the aid of a vacuum truck without the need for confined-space entry.

Servicing Procedure

- · Remove the grate.
- Remove the skimmer tray.
- Cut zip ties and dispose of StormBoom.
- Dispose of debris in skimmer tray.
- Zip tie new StormBoom to skimmer tray.
- Remove by hand or suction out filtration box with vacuum truck hose, then dispose of debris and brush screens.
- Replace filtration box, replace skimmer tray into filtration box and replace grate.



