

# SUNTREE TECHNOLOGIES

## GRATE INLET SKIMMER BASKETS

### STORM WATER QUALITY UNIT

#### DESIGN SPECIFICATIONS

The Grate Inlet Skimmer Basket (GISB) is an inlet-based storm water quality unit that can fit into almost any size inlet, including curb-inlets, and varies in depth from roughly 12 to 30 inches, and can hold hundreds of pounds of debris and sediment. As opposed to traditional end-of-pipe or centralized treatment systems, storm water collected in each drainage area inlet is treated at the inlet first by a hydrocarbon absorbent storm boom, and then by a series of screens with gradually smaller openings to filter large, medium and fine debris and sediment from storm water collected onsite. As with many storm water quality units, an overflow by-pass at the top of the unit allows storm water from extreme events to pass through the system, to minimize localized flooding. GISB's offer many benefits over traditional treatment units, including ease of inspection and maintenance; lower up-front and long-term costs; large vacuum trucks not needed for clean-outs; visually inspected without any burdensome measuring devices.

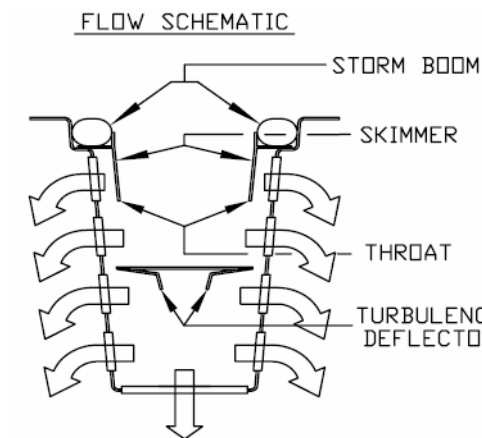
#### About Storm Water Quality in *Your* Area:

The City of Houston and Harris County each have developed guidelines and regulations to help improve the water quality of our bayous and streams.

If a property meets the requirements of these regulations, there are certain things you need to know:

- Both the City of Houston and Harris County require monthly inspection of any SWQ unit onsite.
- In addition, annual re-permitting of these units is required. This entails the following:
  - a. An inspection by a Professional Engineer (PE),
  - b. Payment of the re-permitting fee, and
  - c. An affidavit from the Owner attesting that the guidelines set forth in the property's SWQMP (Storm Water Quality Management Plan) are being followed and are effective.

Construction EcoServices is committed to the education of these regulations and can provide turnkey services to Property Owners to assist with meeting regulatory guidelines.

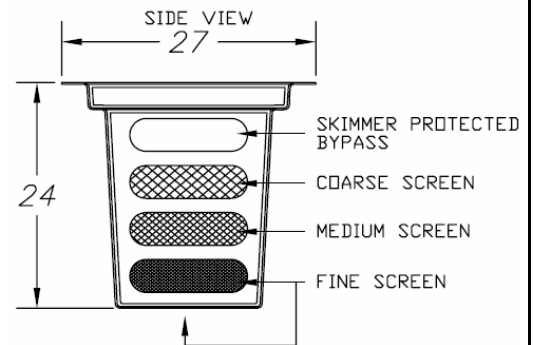


Left: a cross-section of a 27x27x24 GISB, which will fit into and treat a 27x27 inlet.

The schematic to the left shows all facets of the GISB that contribute to treating storm water onsite.

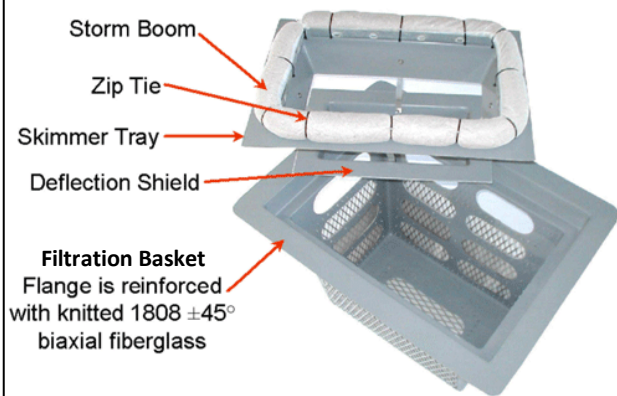
The Storm Boom absorbs hydrocarbons, and is easily replaced when needed.

The bypass skimmer allows storm water from extreme rain events to pass through the system and prevent flooding.



The side view shown above illustrates the three differently sized screens that filter multiple sized particles and debris

#### Grate Inlet Skimmer Box Features



#### INSPECTION & MAINTENANCE

Suntree Technologies recommends quarterly maintenance of the GISB unit, and visual inspection of the unit can easily determine if more frequent maintenance will be required. Inspection of the unit should include notation of the amount or level of sediment/debris accumulated and the status of the storm boom. The storm boom should be replaced when it starts to darken and appears saturated (proper disposal at a waste treatment facility must be followed). Refer to the list below when maintenance is required:

1. Remove the Grate and the Skimmer Tray (shown left)
2. Cut the zip ties attaching the storm boom to the unit, remove the storm boom and properly dispose of it; clean all debris from the skimmer tray.
3. Attach a new storm boom to the skimmer tray with zip ties.
4. Remove the filtration box (shown left) from the



inlet, clean out and properly dispose of all debris and brush the screens clean.

5. Replace filtration box into inlet, place skimmer tray into filtration box, and replace the grate.