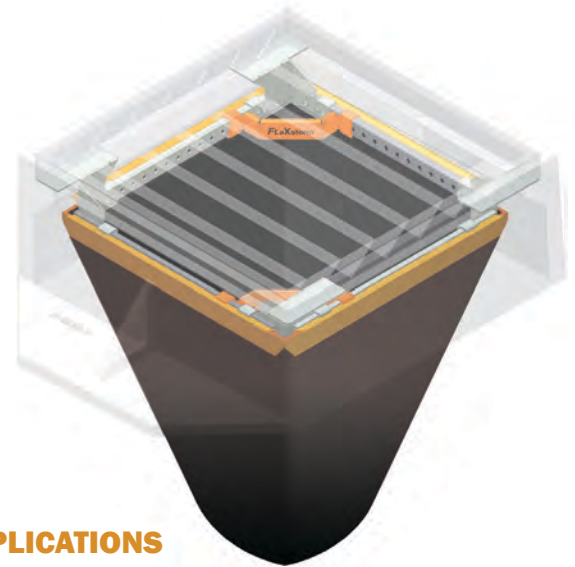


FLEXSTORM

INLET FILTERS™

The Universal Solution for Storm Water Runoff Control

State DOTs and Municipalities across the country now have a universal structural BMP to address the issue of storm sewer inlet protection. The FLEXSTORM system is inexpensive, configurable and adjustable and offers more versatility to fit the wide array of drainage structures throughout the United States while offering various levels of filtration. FLEXSTORM Inlet Filters are the preferred choice for inlet protection and storm water runoff control.



APPLICATIONS

DOT/Road Construction
Commercial/Parking Lots
Residential Developments
Industrial/Maintenance

FEATURES

- **Configurable:** Steel frames configured to fit ANY storm drainage structure
- **Adjustable:** Rectangular frames are adjustable in 1/2" increments up to 5" per side
- **Reusable:** Replaceable geotextile sediment bags designed for construction or post construction applications
- **Affordable:** Low per-unit cost; installs in seconds; easily maintained with Universal Removal Tool (no machinery required)
- **Effective:** Works below grade; overflow feature allows streets to drain with full bag; prevents ponding

CREATE YOUR OWN FLEXSTORM SOLUTION IN THREE EASY STEPS

1. IDENTIFY YOUR FRAME

2. CHOOSE YOUR FILTER BAG

3. CREATE YOUR PART NUMBER

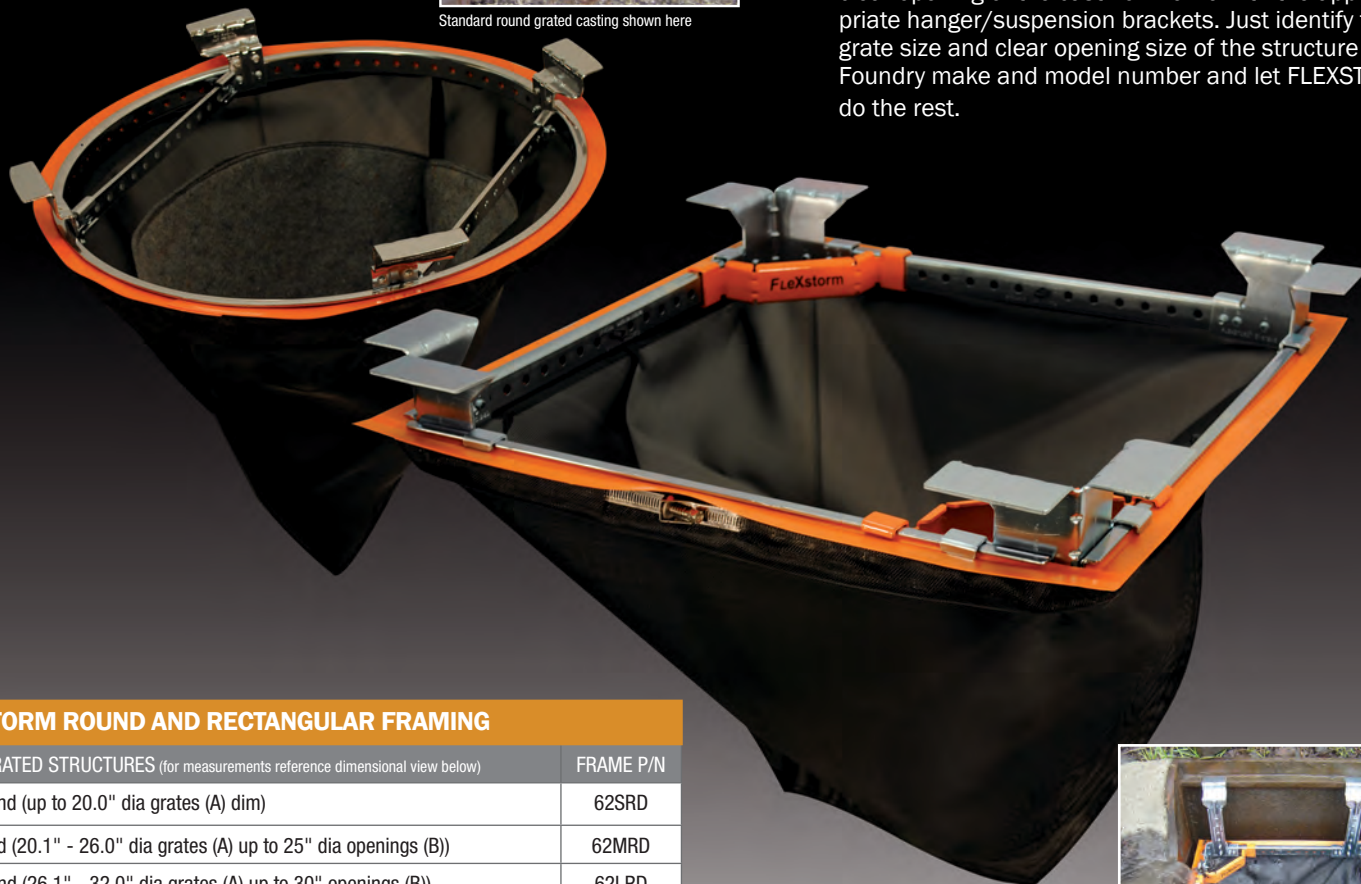
1. IDENTIFY YOUR FRAME



Standard round grated casting shown here

Grated Structures

FLEXSTORM Inlet Filters are well suited for Frame and Grate applications where there is a continuous framing lip upon which the grate rests. The FLEXSTORM assembly is shipped to the field to fit precisely into the clear opening of the cast iron frame with the appropriate hanger/suspension brackets. Just identify the grate size and clear opening size of the structure or the Foundry make and model number and let FLEXSTORM do the rest.



FLEXSTORM ROUND AND RECTANGULAR FRAMING

ROUND GRATED STRUCTURES (for measurements reference dimensional view below)	FRAME P/N	
Small Round (up to 20.0" dia grates (A) dim)	62SRD	
Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B))	62MRD	
Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B))	62LRD	
XL Round (32.1" dia - 39" dia grates (A) up to 37" dia openings (B))	62XLRD	
RECTANGULAR GRATED STRUCTURES (for measurements reference dimensional view below)	FRAME P/N	COMBO INLET P/N*
Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	62SSQ	62SCB
Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	62MSQ	62MCB
Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	62LSQ	62LCB
XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	62XLSQ	62XLCB

*Rigid backslash option is available for combination inlets with open curb hoods. Ref P/N 62RIGCBFL



Adjustable hanger brackets make it possible to fit all rolled curb castings



Combination inlet with magnetic rear guard attachment

FLEXSTORM is the universal solution to fit any storm sewer



Round Inlet
(metal or concrete frame)



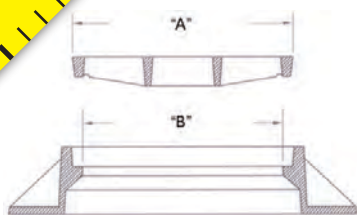
Rectangular Inlet
(metal or concrete)



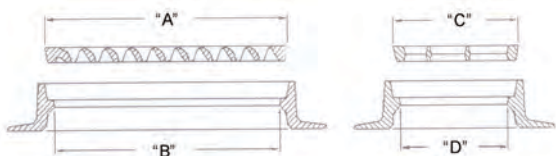
Rectangular Rolled Curb



Combination Inlets
with Curb Hoods



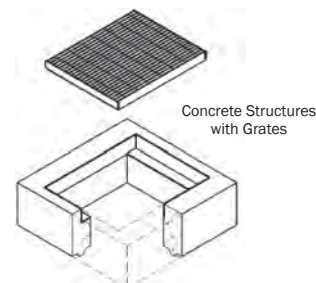
Round Grated Structures



Rectangular Grated Structures

FITTING CONCRETE STRUCTURES

FLEXSTORM has developed special extended hanger brackets for Concrete Structures since there is considerable variance in the clear opening dimensions when compared to cast iron frames. It is important to identify the grate size along with concrete opening and location of the grate supports. NOTE: Sizing follows the same guidelines as the frame and grate designs based on the concrete clear opening dimensions.

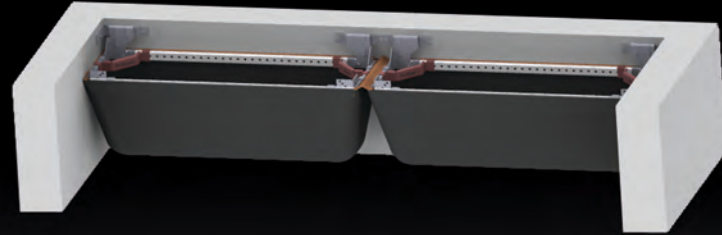


Concrete Structures
with Grates



Wall Mounted Structures

FLEXSTORM wall mount units are designed to mount easily inside open throat concrete structures beneath the curb opening. Maintenance is also simplified with the easy off hanger system. All stainless steel mounting hardware is provided.



FLEXSTORM WALL MOUNT FOR OPEN THROAT CURB INLETS

CURB OPENING SIZE	FRAME P/N
Up to 4' curb openings (1 Filter and Mounting Hardware)	62WM1
Between 4' and 8' (2 Filters and Mounting Hardware)	62WM2
Between 8' and 12' (3 Filters and Mounting Hardware)	62WM3
Between 12' and 16' (4 Filters and Mounting Hardware)	62WM4

Nyloplast Castings

FLEXSTORM Filters for Nyloplast castings are comprised of stainless steel framing designed to fit all castings ranging from 12" to 30" diameter. FLEXSTORM Catch-ITs are now available specified with the FX or FX-S (short) filter bags.



FLEXSTORM NYLOPLAST STAINLESS STEEL FRAMING

Nyloplast Casting Size	FRAME P/N
12" diameter	6212NY
15" diameter	6215NY
18" diameter	6218NY
24" diameter	6224NY
30" diameter	6230NY

FRAMING MATERIAL OPTIONS

Choosing the best framing material for your application is a matter of identifying the type of environment and the length of usage.

Zinc Plated

FLEXSTORM
STANDARD
FRAMING

Medium to long term applications with low to moderate levels of salt exposure

Chrome Plated

Medium to Long term applications with moderate to high levels of salt exposure

FRAMING MATERIAL	P/N SUFFIX
Chrome Plated	CHR

Stainless Steel

Permanant applications in harsh environments and/or high levels of salt or chemical exposure

Compliant in regions with stringent environmental regulations

FRAMING MATERIAL	P/N SUFFIX
Stainless Steel	SS

2. CHOOSE YOUR FILTER BAG

Silt, sand, gravel and Large partical filtration

The standard woven polypropylene bag has the highest flow rate in the industry. This durable geotextile resists clogging and cleans up easily. It is well suited for construction sites and heavy flow drainage areas. Provisions for hydrocarbon removal are offered as add-ons (see FX+ and FXO).

FILTRATION EFFICIENCY = 82% †

† Large scale, 3rd party testing per ASTM D 7351, Standard Test Method for Determination of Sediment Retention Device Effectiveness in Sheet Flow Application using 7% USDA Sandy Loam

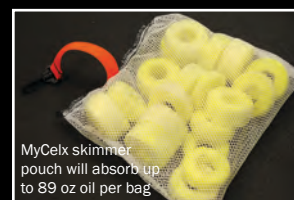
FX

Flexstorm standard woven bag for temporary or permanent applications



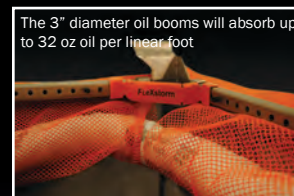
FX+

Standard woven bag with MyCelx skimmer for low to moderate hydrocarbon removal



FXO

Standard woven bag with oil boom for low to moderate hydrocarbon removal



Oil, grease, metals and Fine partical filtration

The FLEXSTORM PC 'Post Construction' line of inlet filters is designed to specifically target small particle and hydrocarbon removal from parking lots, industrial buildings, and other drainage hot spots.

TSS = 99% TPH = 97% ‡

‡ Large scale testing at 90 GPM. 3rd party results using US Silica OK-110 sand at 1750 mg/L measuring TSS per SM 2540D. TPH tested at 243 mg/L used motor oil using EPA Method 1664A.

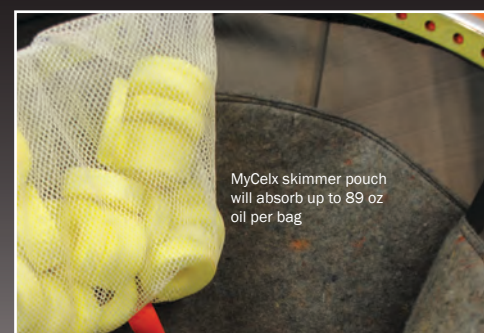
PC

For very fine particals with moderate levels of hydrocarbon runoff



PC+

For very fine particals with high levels of hydrocarbon runoff



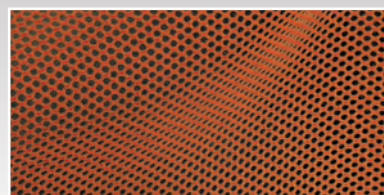
FLEXSTORM FILTER BAGS

FLEXSTORM FILTER BAGS	STANDARD BAG P/N (22" depth)	SHORT BAG P/N (12" depth)
FX: Standard Woven Bag	FX	FX-S
FX+: Woven w/ MyCelx	FXP	FXP-S
FXO: Woven w/ Oil Boom	FXO	FXO-S
PC: Post Construction Bag	PC	PC-S
PC+: PC Bag w/ MyCelx	PCP	PCP-S
LL: Litter and Leaf Bag	LL	LL-S
IL: IDOT NonWoven Bag	IL	IL-S

SPECIALITY BAGS

LL - LITTER AND LEAF BAG

Polyester mesh bag designed to capture litter, leaves and large debris



IL - IDOT NONWOVEN

IDOT specified non-woven with polyester reinforcement mesh for temporary use



FILTER BAG SPECIFICATIONS & CAPABILITIES

Bag Type (P/N)	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
Woven (FX)	200	40
Post Construction (PC)	137	140
NonWoven (IL)	145	70
Litter & Leaf Bag (LL)	High	3.5

Standard Bag Size [§]	Solids Storage Capacity (CuFt)	Filtered Flow Rate at 50% Max (CFS)			Oil Retention (Oz)	
		FX	PC	IL	PC*	PCP**
Small	1.6	1.2	0.8	0.9	66	155
Medium	2.1	1.8	1.2	1.3	96	185
Large	3.8	2.2	1.5	1.6	120	209
XL	4.2	3.6	2.4	2.6	192	370

* PC filter bag at 50% max adsorption capacity

** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

§ Standard bags are 22" in depth. Short bags are 12" in depth, reducing solids storage capacity by approximately 50%.

3. CREATE YOUR PART NUMBER

FRAME P/N

Enter your frame part number from step one.

FILTER BAG P/N

Enter your filter bag part number from step two.

FRAMING MATERIAL

Enter your framing material suffix from step one.*

*Zinc is standard framing and requires no suffix. Use "CHR" for chrome and "SS" for stainless steel.

Create your FLEXSTORM Inlet Filter part number combining your frame and bag part numbers. Framing upgrades are identified with a suffix. Please note that the specific casting foundry make and model number, DOT callout, or detailed dimensional form must be provided with any order so FLEXSTORM can configure your customized solution. All units are shipped to the field fully assembled to fit precisely into your identified drainage structure.

Need help with your Part Number?

Use this part number guide to identify your frame and filter bag part number, then add your framing material suffix.

PART NUMBER GUIDE			FILTER BAG SELECTION <small>(Part Numbers are for Standard 22" depth bags. Short 12" depth bags are available for all types using -S Suffix)</small>							
FRAMING TYPE AND SIZE SELECTION	Choose your frame type and size below, then select your filter bag in the columns to the right to identify your part number. If upgrading from standard zinc framing, append your part number with either "CHR" for chrome or "SS" for stainless steel.			FX: Woven Standard Bag	FX+: Woven w/ Mycelx Skimmer	FXO: Woven w/ Oil Boom	PC: Post Construction (Adsorb-it Lined)	PC+: PC bag w/ MyCelx Skimmer	LL: Litter Leaf Bag	IL: IDOT Specified NonWoven Bag
			Frame P/N:	Bag P/N: FX	Bag P/N: FXP	Bag P/N: FXO	Bag P/N: PC	Bag P/N: PCP	Bag P/N: LL	Bag P/N: IL
	ROUND	Small Round (up to 20.0" dia grates (A) dim)	62SRD	62SRDFX	62SRDFXP	62SRDFXO	62SRDPC	62SRDPCP	62SRDLL	62SRDIL
		Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B))	62MRD	62MRDFX	62MRDFXP	62MRDFXO	62MRDPC	62MRDPCP	62MRDLL	62MRDIL
		Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B))	62LRD	62LRDFX	62LRDFXP	62LRDFXO	62LRDPC	62LRDPCP	62LRDLL	62LRDIL
		XL Round (32.1" dia - 39" dia grates (A) up to 37" dia openings (B))	62XLRD	62XLRDFX	62XLRDFXP	62XLRDFXO	62XLRDPC	62XLRDPCP	62XLRDLL	62XLRDIL
	RECTANGULAR	Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	62SSQ	62SSQFX	62SSQFXP	62SSQFXO	62SSQPC	62SSQPCP	62SSQLL	62SSQIL
		Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	62MSQ	62MSQFX	62MSQFXP	62MSQFXO	62MSQPC	62MSQPCP	62MSQLL	62MSQIL
		Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	62LSQ	62LSQFX	62LSQFXP	62LSQFXO	62LSQPC	62LSQPCP	62LSQLL	62LSQIL
		XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	62XLSQ	62XLSQFX	62XLSQFXP	62XLSQFXO	62XLSQPC	62XLSQPCP	62XLSQLL	62XLSQIL
	COMBO INLETS	Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62SCB	62SCBFX	62SCBFXP	62SCBFXO	62SCBPC	62SCBPCP	62SCBLL	62SCBIL
		Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62MCB	62MCBFX	62MCBFXP	62MCBFXO	62MCBPC	62MCBPCP	62MCBLL	62MCBIL
		Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62LCB	62LCBFX	62LCBFXP	62LCBFXO	62LCBPC	62LCBPCP	62LCBLL	62LCBIL
		XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62XLCB	62XLCBFX	62XLCBFXP	62XLCBFXO	62XLCBPC	62XLCBPCP	62XLCBLL	62XLCBIL
NYLOPLAST	12" diameter Nyloplast castings (Stainless Steel Framing standard)	6212NY	6212NYFX	6212NYFXP	6212NYFXO	6212NYPC	6212NYPCP	6212NYLL	6212NYIL	
	15" diameter Nyloplast castings (Stainless Steel Framing standard)	6215NY	6215NYFX	6215NYFXP	6215NYFXO	6215NYPC	6215NYPCP	6215NYLL	6215NYIL	
	18" diameter Nyloplast castings (Stainless Steel Framing standard)	6218NY	6218NYFX	6218NYFXP	6218NYFXO	6218NYPC	6218NYPCP	6218NYLL	6218NYIL	
	24" diameter Nyloplast castings (Stainless Steel Framing standard)	6224NY	6224NYFX	6224NYFXP	6224NYFXO	6224NYPC	6224NYPCP	6224NYLL	6224NYIL	
WALL MOUNT	30" diameter Nyloplast castings (Stainless Steel Framing standard)	6230NY	6230NYFX	6230NYFXP	6230NYFXO	6230NYPC	6230NYPCP	6230NYLL	6230NYIL	
	Open Throat Gutters - Curb Opening Size (Units shipped with Short 12" Depth Bags unless otherwise specified)									
	Up to 4' curb openings (1 Filter and Mounting Hardware)	62WM1	62WM1FX	62WM1FXP	62WM1FXO	62WM1PC	62WM1PCP	62WM1LL	62WM1IL	
	Between 4' and 8' (2 Filters and Mounting Hardware)	62WM2	62WM2FX	62WM2FXP	62WM2FXO	62WM2PC	62WM2PCP	62WM2LL	62WM2IL	
	Between 8' and 12' (3 Filters and Mounting Hardware)	62WM3	62WM3FX	62WM3FXP	62WM3FXO	62WM3PC	62WM3PCP	62WM3LL	62WM3IL	
	Between 12' and 16' (4 Filters and Mounting Hardware)	62WM4	62WM4FX	62WM4FXP	62WM4FXO	62WM4PC	62WM4PCP	62WM4LL	62WM4IL	

Replacement Bags Available

Replacement bags are available for all units shipped complete with stainless steel clamping band. Size categories are for either round or rectangular framing. The original framing detail is required with each order.



BAG SIZE	FX	FXP	FXO	PC	PCP	LL	IL
Small	62SRBFX	62SRBFXP	62SRBFXO	62SRBPC	62SRBPCP	62SRBLL	62SRBIL
Medium	62MRBFX	62MRBFXP	62MRBFXO	62MRBPC	62MRBPCP	62MRBLL	62MRBIL
Large	62LRBFX	62LRBFXP	62LRBFXO	62LRBPC	62LRBPCP	62LRBLL	62LRBIL
XL	62XLRBFX	62XLRBFXP	62XLRBFXO	62XLRBPC	62XLRBPCP	62XLRBLL	62XLRBIL

Accessories

UNIVERSAL MAINTENANCE TOOL

Dual purpose tool makes both grate and filter removal safe and fast



ALL PRODUCTS MANUFACTURED BY:



ADS FLEXSTORM INLET FILTER SPECIFICATIONS

IDENTIFICATION

The installer shall inspect the plans and/or worksite to determine the quantity of each drainage structure casting type. The foundry casting number, exact grate size and clear opening size, or other information will be necessary to finalize the FLEXSTORM part number and dimensions. The units are shipped to the field configured precisely to fit the identified drainage structure.

MATERIAL AND PERFORMANCE

The FLEXSTORM Inlet Filter system is comprised of a corrosion resistant steel frame and a replaceable geotextile filter bag attached to the frame with a stainless steel locking band. The filter bag hangs suspended at a distance below the grate that shall allow full water flow into the drainage structure if the bag is completely filled with sediment. The standard Woven Polypropylene FX filter bags are rated for 200 gpm/sqft with a removal efficiency of 82% when filtering a USDA Sandy Loam sediment load. The Post Construction PC filter bags are rated for 137 gpm/sqft and have been 3rd party tested at 99% TSS removal to 110 micron and 97% TPH removal of used motor oil hydrocarbon mix.

INSTALLATION

Remove the grate from the casting or concrete drainage structure. Clean the ledge (lip) of the casting frame or drainage structure to ensure it is free of stone and dirt. Drop in the FLEXSTORM Inlet Filter through the clear opening and be sure the suspension hangers rest firmly on the inside ledge (lip) of the casting. Replace the grate and confirm it is elevated no more than 1/8", which is the thickness of the steel hangers. For wall mount units, follow instructions for attaching the stainless steel mounting brackets using the provided concrete fasteners.

INSPECTION FREQUENCY

Construction site inspection should occur following each 1/2" or more rain event. Post Construction inspections should occur three times per year (every four months) in areas with mild year round rainfall and four times per year (every three months Feb-Nov) in areas with summer rains before and after the winter snowfall season. Industrial application site inspections (loading ramps, wash racks, maintenance facilities) should occur on a regularly scheduled basis no less than three times per year.

MAINTENANCE GUIDELINES

Empty the filter bag if more than half filled with sediment and debris, or as directed by the Engineer. Remove the grate, engage the lifting bars or handles with the FLEXSTORM Removal Tool, and lift from the drainage structure. Dispose of the sediment or debris as directed by the Engineer or Maintenance Contract in accordance with EPA guidelines. As an alternative, an industrial vacuum may be used to collect the accumulated sediment. Remove any caked on silt from the sediment bag and reverse flush the bag with medium spray for optimal filtration. Replace the bag if torn or punctured to 1/2" diameter or greater on the lower half of the bag. Post Construction PC/PC+ Bags should be maintained prior to 50% oil saturation. The average 2' x 2' PC filter bag will retain approx 96 oz (5.4 lbs) of oil at which time it should be serviced or replaced. It can be centrifuged or passed through a wringer to recover the oils, and the fabric reused with 85% to 90% efficacy. It may also be recycled for its fuel value through waste to energy incineration. When utilizing the MyCelx Skimmer Pouches in the + bags, note that the skimmers start yellow in color and will gradually turn brown as they become saturated, indicating time for replacement. Each MyCelx skimmer pouch will absorb approximately 89 oz (5 lbs) of oil before requiring replacement. It may also be recycled for its fuel value through waste to energy incineration. Dispose of all oil contaminated products in accordance with EPA guidelines.

FILTER BAG REPLACEMENT

Remove the bag by loosening or cutting off the clamping band. Take the new filter bag, which is equipped with a stainless steel worm drive clamping band, and use a screw driver to tighten the bag around the frame channel. Ensure the bag is secure and that there is no slack around the perimeter of the band.

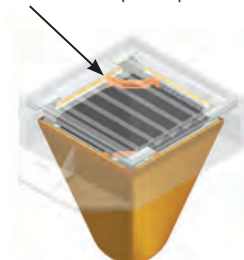
Lift Handles ease installation and maintenance



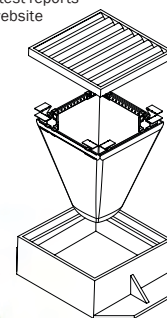
Replaceable Sediment Bag

1/8" thick steel hangers & channels; precision stampings configured to fit each individual casting

Rectangular frames are adjustable in 1/2" increments up to 5" per side



CAD drawings, work instructions and test reports on website



US Patent No. 7,670,483