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**RE: Trash Treatment Control Device Fact Sheet
For
REM Inc. Full Trash Capture TRITON BFTG-FTC Device
(BioFlex Trash Guard)**

September 10, 2021

Mr. Leo Cosentini
California State Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA. 95812

Dear Mr. Cosentini,

REM Inc. would like to thank you for taking this opportunity to review our Updated Fact Sheet for the currently approved Full Trash Capture Device, our **TRITON BFTG-FTC**. Throughout this application you will find the pertinent information requested from the Fact Sheet Update Requirements, presented in the requested layout.

Currently, REM Inc. has the TRITON BFTG-FTC Device as an approved FTC Device as well as the Triton PERF-FTC Insert and the Triton CPS-FTC on the approved list of devices.

Again, we thank you for taking this time to review our application, and if any additional information is required or needed, please feel free to contact us when needed.

Charles Fleischmann

Charles Fleischmann
Vice President
Revel Environmental Manufacturing, Inc.
REM Inc.



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Section: 1

Cover Letter

1A: General Description

The TRITON BFTG-FTC can be used as a stand-alone filtration device for capturing trash and debris inside of storm drain catch basins. With its intended design, it can capture pollutants and debris as small as 5mm, meeting the requirement for Full Trash Capture Devices. It does this, while still maintaining excellent flow rates due to its 3-dimensional filtration properties. The BFTG-FTC device is intended to be installed in storm drain catch basins and is designed for lateral and surface flow capturing applications depending upon configuration.

1B: Device Owner Contact and location information

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Vice President
960 Detroit Ave. Suite B
Concord, CA. 94518
(925) 676-4736
Charlie@remfilters.com

1C: Website Information

<https://remfilters.com>

1D: Manufacturing Location

All REM TRITON products are manufactured and designed in the state of California. REM Inc. has specialized in providing storm drain filters/trash capture devices all over the country for 24+ years. *Address location listed above.

1E: Brief summary of field/testing results to demonstrate device functions

The TRITON BFTG-FTC was successfully tested in capturing debris that is 5mm or greater in size, in a number of test basins located in the greater San Francisco Bay Area and Southern California. Results and pictures from these tests can be found in Section 8.

1F: Brief summary of limitations, and operational, sizing, and maintenance considerations

The TRITON BFTG-FTC units are extremely adaptable and customizable in terms of mounting and attaching to the many different types of catch basin configurations in the field today. Due to the many different product applications REM has been able to offer, we have been very successful in filtering many catch basins that might otherwise be “passed up” on. Each of these devices can be adjusted to fit custom layouts/structures. The proper unit is determined in part by the outgoing pipe size, and then the structure size is taken into account. The approximate installation time takes between 10-25 minutes, depending on the infrastructure layout. Maintenance on BFTG-FTC devices typically involves an industrial vacuum truck when the units are about 50% loaded or as required. Maintenance should be performed at least 3 times per year or as needed.

To note, some devices are designed to have a bypass deflector plate. The deflector plate is attached as needed and the bypass height can be adjusted to what the structure allows or is required. This in turn allows easy access to the inside of the devices that do require a plate due to incoming flow location. This helps with line jetting and Vector control accessibility in the drains when needed.

This device is also able to house an absorbent media as well if ever required. No design modifications are needed, the media element is simply placed between the inner and outer layers of the stainless-steel support housings while maintaining its FTC requirement.

1G: Device installation locations

REM Inc. has been installing BFTG-FTC devices in multiple California locations as well as national sales across the U.S. as this has been an approved FTC device since 2012. Some installation areas of acknowledgement would be:

City of Santa Clara: Dept. of Public Works

City of Concord: Dept. of Public Works

City of Hayward: Dept. of Public Works

Please feel free to ask for a more detailed reference list.

1H: Certification Clause

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Charles Fleischmann

Charles Fleischmann

Vice President

REM Inc.

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Section 3: Physical Description

3A: Trash Capture

The TRITON INSERT-BFTG-FTC device utilizes Bioflex (BFTG) Filter Media, which is a three-dimensional woven natural fiber media. BFTG has a mesh density of 3.5 ounces per square foot, minimizes occlusion and blinding while filtering at high volumes. The interior edge of the Bioflex is fitted with a netted polyester fiber that is designed to capture 100% trash and debris at 5 mm or greater in size. The Bioflex is housed in a stainless-steel cartridge in a wide range of configuration depending upon the many different types and sizes of catch basin available today.

3B: Peak Flows/Trash Volumes

BFTG-FTC devices are primarily sized in accordance with the catch basins outgoing pipe diameter, inside wall dimensions or throat, below the grate. Selecting the correct size unit not only helps to ensure max flow/bypass rates are met, but also maximum trash capturing volume. The catch basin structure size is next used as a determining factor for identifying the proper size unit. For example: a 2' X 3' catch basin could utilize a model TR2436-BFTG-FTC which allows enough spacing from the walls for incoming water flows to be fully captured.

3C: Hydraulic Capacity

Section 1)

Standard size models shown:

Inserts:

Model:	TR1818	TR2436	TR24RD	TR24SR	TR36RD
Housing Body Width:	17.5" X 17.5"	34.5" X 23.5"	23.5" Dia.	23.5" X 23.5"	35" Dia.
Cartridge Height:	8"	8"	12"	12"	16"
Cartridge	TR10-CART(8)	TR14-CART(8)	TR14-CART(12)	TR14-CART(12)	TR14-CART(16)
Cartridge Diameter:	10" Dia.	14" Dia.	14" Dia.	14" Dia.	14" Dia.
Max Treatment Rate: (Empty)	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	2.96 (CFS)	3.86 (CFS)
Treatment Rate at 50% capacity:	.42 (CFS)	.78 (CFS)	1.48 (CFS)	1.48 (CFS)	1.93 (CFS)
Treatment Rate at 75% capacity:	.21 (CFS)	.39 (CFS)	.74 (CFS)	.74 (CFS)	.96 (CFS)
Bypass Flow:	5.14 (CFS)	13.15 (CFS)	13.15 (CFS)	13.15 (CFS)	13.15 (CFS)

CPS:

Model:	TR20(12)-CPS	TR24(16)-CPS	TR28(16)-CPS	TR40(18)-CPS
Width:	20"	24"	28"	40"
Height:	12"	16"	16"	18"
Depth/ Radius	8"	12"	14"	20"
Bypass Radius	6"	10"	12"	18"
Max Treatment Rate: (Empty)	2.78 (CFS)	7.74 (CFS)	9.72 (CFS)	13.21 (CFS)
Treatment Rate at 50% capacity:	1.39 (CFS)	3.87 (CFS)	4.86 (CFS)	6.60 (CFS)
Treatment Rate at 75% capacity:	.69 (CFS)	1.93 (CFS)	2.43 (CFS)	3.30 (CFS)
Bypass Flow:	15.48 (CFS)	25.65 (CFS)	29.24 (CFS)	42.55 (CFS)

Top Hat:

Model:	TR1818-TH	TR2436-TH	TR24RD-TH	TR36RD-TH
Width:	17.5" X 17.5"	23.5" X 34.5"	23.5" Dia.	35" Dia.
Cartridge Height:	8"	8"	12"	16"
Cartridge:	TR10CART(8)	TR14CART(8)	TR14CART(12)	TR14CART(16)
Cartridge Diameter:	10"	14"	14"	14"
Max Treatment Rate: (Empty)	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	3.86 (CFS)
Treatment Rate at 50% capacity:	.42 (CFS)	.78 (CFS)	1.48 (CFS)	1.93 (CFS)
Treatment Rate at 75% capacity:	.21 (CFS)	.39 (CFS)	.74 (CFS)	.96 (CFS)
Bypass Flow:	5.14 (CFS)	13.15 (CFS)	13.15 (CFS)	13.15 (CFS)

Curb Inlet:

Model:	TRC2.0	TRC3.5	TRC7.0	TRC14.0
Width:	9"	9"	9"	9"
Height:	12.5"	12.5"	12.5"	12.5"
Length:	2'	3.5'	7'	14'
Max Treatment Rate: (Empty)	.82 (CFS)	1.93 (CFS)	3.88 (CFS)	7.74 (CFS)
Treatment Rate at 50% capacity:	.41 (CFS)	.96 (CFS)	1.94 (CFS)	3.87 (CFS)
Treatment Rate at 75% capacity:	.21 (CFS)	.48 (CFS)	.97 (CFS)	1.93 (CFS)
Bypass Flow:	8.35 (CFS)	14.24 (CFS)	28.42 (CFS)	56.35 (CFS)

Area Drain:

Model:	ADF-7	ADF-10	ADF-14	ADF-24
Diameter:	7" Dia.	10" Dia.	14" Dia.	24" Dia.
Height:	8"	8"	16"	16"
Cartridge:	TR7CART(8)	TR10CART(8)	TR14CART(16)	TR24CART(16)
Bypass:	3" Dia.	6" Dia.	10" Dia.	20" Dia.
Max Treatment Rate: (Empty)	.65 (CFS)	.84 (CFS)	3.86 (CFS)	8.85 (CFS)
Treatment Rate at 50% capacity:	.32 (CFS)	.42 (CFS)	1.93 (CFS)	4.42 (CFS)
Treatment Rate at 75% capacity:	.16 (CFS)	.21 (CFS)	.96 (CFS)	2.21 (CFS)
Bypass Flow:	1.61 (CFS)	5.14 (CFS)	13.15 (CFS)	51.29 (CFS)

TDAM:

<i>Model:</i>	TT2	TDAM5(5)	TDAM8(10)	TDAM12(5)
<i>Width:</i>	4"	5"	8"	12"
<i>Height:</i>	4"	5"	10"	5"
<i>Trench Width:</i>	4"	5"	8"	12"
<i>Bypass:</i>	3" X 4"	3" X 5"	3" X 8"	3" X 12"
<i>Max Treatment Rate: (Empty)</i>	.025 (CFS)	.17 (CFS)	.52 (CFS)	.40 (CFS)
<i>Treatment Rate at 50% capacity:</i>	.013 (CFS)	.08 (CFS)	.26 (CFS)	.20 (CFS)
<i>Treatment Rate at 75% capacity:</i>	.006 (CFS)	.04 (CFS)	.13 (CFS)	.11 (CFS)
<i>Bypass Flow:</i>	.44 (CFS)	.55 (CFS)	.88 (CFS)	1.33 (CFS)

Section 2)

To determine the treatment rates, a commonly used equation was calculated. This is similar to the method used by the County of Los Angeles Dept. of Public Works in a 2006 report on Full Capture Screen and Bypass Requirements. An example of the equation is below:

$$Q_{MTR} = \frac{C_d A \sqrt{2gh}}{SF}$$

Calculation for the model TR36RD-BFTG-FTC Device:

$$Q_{MTR} = \frac{0.60 * 1.83sf \sqrt{2 * \frac{32.2ft}{s^2} * .875ft}}{2}$$

This equals: **3.86 CFS** for the maximum treatment flow rate, while utilizing a safety factor of 2.

Section 3)

N/A – No alternative configurations effect the hydraulic capacities of the devices.

3D: Comparison Table

*For standard sized models. More sizes and custom configurations are available.

Inserts:

<i>Model:</i>	TR1818	TR2436	TR24RD	TR24SR	TR36RD
<i>Housing Body Width:</i>	17.5" X 17.5"	34.5" X 23.5"	23.5" Dia.	23.5" X 23.5"	35" Dia.
<i>Cartridge Height:</i>	8"	8"	12"	12"	16"
<i>Cartridge</i>	TR10-CART(8)	TR14-CART(8)	TR14-CART(12)	TR14-CART(12)	TR14-CART(16)
<i>Cartridge Diameter:</i>	10"	14" Dia.	14" Dia.	14" Dia.	14" Dia.
<i>Max Treatment Rate: (Empty)</i>	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	2.96 (CFS)	3.86 (CFS)
<i>Maximum Trash Capture Volume: (gallons)</i>	7.8 (Gallons)	22.7 (Gallons)	14.5 (Gallons)	14.5 (Gallons)	59.8 (Gallons)

CPS:

<i>Model:</i>	TR20(12)-CPS	TR24(16)-CPS	TR28(16)-CPS	TR40(18)-CPS
<i>Width:</i>	20"	24"	28"	40"
<i>Height:</i>	12"	16"	16"	18"
<i>Depth/ Radius</i>	8"	12"	14"	20"
<i>Bypass Radius</i>	6"	10"	12"	18"
<i>Max Treatment Rate: (Empty)</i>	2.78 (CFS)	7.74 (CFS)	9.72 (CFS)	13.21 (CFS)
<i>Maximum Trash Capture Volume: (gallons)</i>	60.7 Gallons (3' X 3' Drain)	74 Gallons (3' X 3' Drain)	125.8 Gallons (3' X 5' Drain)	186.6 Gallons (3' X 7' Drain)

Top Hat:

Model:	TR1818-TH	TR2436-TH	TR24RD-TH	TR36RD-TH
Width:	17.5" X 17.5"	23.5" X 34.5"	23.5" Dia.	35" Dia.
Cartridge Height:	8"	8"	12"	16"
Cartridge:	TR10CART(8)	TR14CART(8)	TR14CART(12)	TR14CART(16)
Cartridge Diameter:	10"	14"	14"	14"
Max Treatment Rate: (Empty)	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	3.86 (CFS)
Maximum Trash Capture Volume: (gallons)	8.51 Gallons	24.5 Gallons	15.51 Gallons	59.84 Gallons

Curb Inlet:

Model:	TRC2.0	TRC3.5	TRC7.0	TRC14.0
Width:	9"	9"	9"	9"
Height:	12.5"	12.5"	12.5"	12.5"
Length:	2'	3.5'	7'	14'
Max Treatment Rate: (Empty)	.82 (CFS)	1.93 (CFS)	3.88 (CFS)	7.74 (CFS)
Maximum Trash Capture Capacity: (Gallons)	11.69 Gallons	20.45 Gallons	40.9 Gallons	81.8 Gallons

Area Drain:

Model:	ADF-7	ADF-10	ADF-14	ADF-24
Diameter:	7" Dia.	10" Dia.	14" Dia.	24" Dia.
Height:	8"	8"	16"	16"
Cartridge:	TR7CART(8)	TR10CART(8)	TR14CART(16)	TR24CART(16)
Bypass:	3" Dia.	6" Dia.	10" Dia.	20" Dia.
Max Treatment Rate: (Empty)	.65 (CFS)	.84 (CFS)	3.86 (CFS)	8.85 (CFS)
Maximum Trash Capture Capacity: (Gallons)	1.67 Gallons	3.41 Gallons	13.33 Gallons	39.17 Gallons

TDAM:

Model:	TT2	TDAM5(5)	TDAM8(10)	TDAM12(5)
Width:	4"	5"	8"	12"
Height:	4"	5"	10"	5"
Trench Width:	4"	5"	8"	12"
Bypass:	3" X 4"	3" X 5"	3" X 8"	3" X 12"
Max Treatment Rate: (Empty)	.025 (CFS)	.17 (CFS)	.52 (CFS)	.40 (CFS)
Maximum Trash Capture Capacity: (Gallons)	3.32 Gallons	5.19 Gallons	16.62 Gallons	12.47 Gallons

3E: Design Drawings



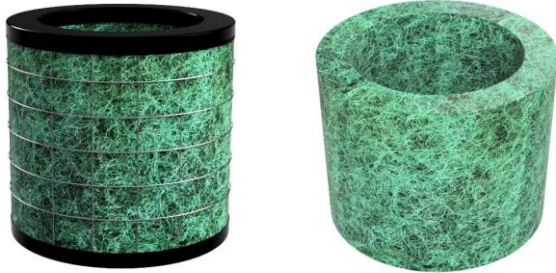
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REM TRITON BFTG - FTC



A side view of the Bioflex Media configured in round storm water cartridges.

Product Overview:

REM's Bioflex Filter Media (BFTG) is a three dimensional woven natural fiber media. BFTG has a mesh density of 3.5 ounces per square foot, minimizes occlusion and blinding while filtering at high volumes. The exterior edge of the Bioflex is fitted with a netted polyester fiber that is designed to capture 100% of trash and debris at 5 mm or greater in size. BFTG is housed in stainless steel cartridges in a wide range of configurations, depending upon the many different types and sizes of catch basin available today. Bioflex may be utilized in both new construction or retrofitted in existing catch basin filters. They are sized to spec or modified in the field for drains with unusual dimensions and unique frame and grates. Filter Cartridges may be easily removed when servicing. Different media strategies can be combined with BFTG to optimized capturing for specific pollutant of concerns.

Notes:

- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- Flow rate based on 1.41 cfs, per square foot.
- Bioflex will capture 100% of particles 5 mm or greater in size.
- UV Resistance (ASTM D 4355 – 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- **Made in the USA.**
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.



General Flow Rates Per Square Foot

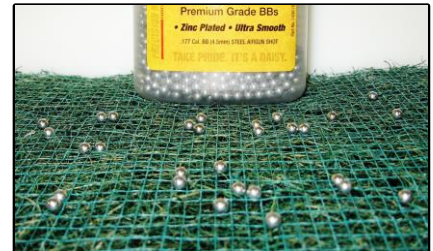
1' X 1' Square Foot = 1.41 Cfs.
2' X 2' Square Foot = 2.82 Cfs.
3' X 3' Square Foot = 4.23 Cfs.



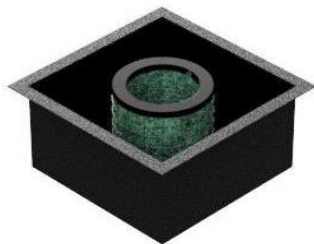
BFTG Bioflex Media in a Stainless Steel Cartridge.



Different Size Filter Cartridges using BFTG



This picture helps illustrate that both sides of the Bioflex is able to capture debris that is 5 mm or larger. Note the BB's shown represent a 4.5mm diameter, which are easily trapped.



BFTG Bioflex installed in a catch basin Filter



BFTG Bioflex Media shown in a TDAM Filter



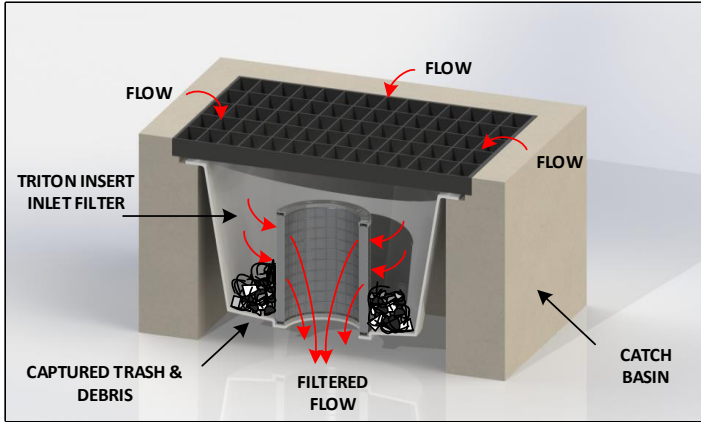
A side view of the Bioflex. (1.75" thick allows for longer filtration times due to the 3 dimensional webbing.



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REM TRITON INSERT – BFTG - FTC



Product Overview:

REM's TRITON - INSERT Filters are multipurpose catch basin filters designed to capture sediment, trash, debris, suspended solids, and other storm water pollutants. They may be utilized in new construction or retrofitted in existing catch basin structures. They are sized to spec or modified in the field for drains with unusual dimensions and unique frame and grates. Bioflex (BFTG) Media is designed to capture debris, trash and sediment while sustaining very high treatment rates. Mesh density of 3.5 ounces per square foot minimizes occlusion and blinding while capturing 100% of particles at 5mm or greater in size. Filter Cartridges may be easily removed when servicing. **Media strategy may be optimized for specific pollutant concerns.**

Standard Size Dimensions (Not all model and sizes are listed here)

Model:	TR1818	TR2436	TR24RD	TR36RD
Width:	17.5" X 17.5"	34.5" X 23.5"	23.5" Dia.	35"
Cartridge Height:	8"	8"	12"	16"
Cartridge	TR10-CART(8)	TR14-CART(8)	TR14-CART(12)	TR14-CART(16)
Cartridge Diameter:	10" Dia.	14" Dia.	14" Dia.	14" Dia.
Max Treatment Rate:	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	3.86 (CFS)
Bypass Flow:	5.14 (CFS)	13.15 (CFS)	13.15 (CFS)	13.15 (CFS)

Notes:

- Filter bodies are constructed using **100% recycled** High Molecular Weight Polyethylene Plastic (HMWPE) with U.V. inhibitors.
- Filter cartridge housings are constructed utilizing Type 304 13ga. Stainless Steel, with 2" welded square openings.
- Removable cartridge tops and bottoms are constructed utilizing over 90% recycled ABS Plastic.
- BFTG - Bioflex are constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- REM TRITON filter cartridges can be removed for ease of cleaning and maintenance.
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- UV Resistance (ASTM D 4355 - 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Made in the USA.
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.
- Made in the USA.**



Model: TR2424 Installed



Model: TR24RD Installed



Round Catch Basin





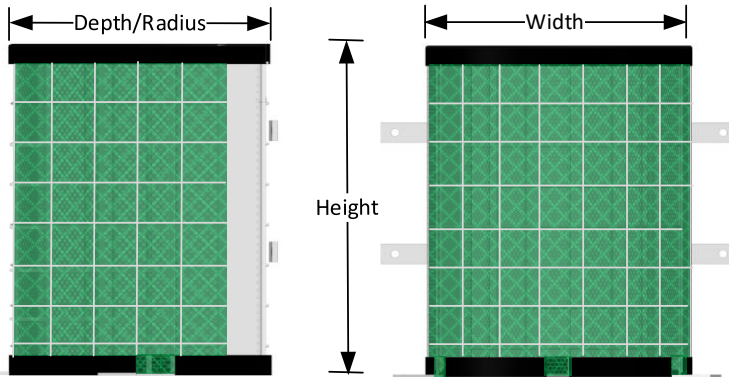
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REM TRITON CPS – BFTG - FTC



Side View

Front View

Standard Size Dimensions

Model:	TR20(12)CPS-FTC	TR24(16)CPS-FTC	TR28(16)CPS-FTC	TR40(18)CPS-FTC
Width:	20"	24"	28"	40"
Height:	12"	16"	16"	18"
Depth/Radius:	8"	12"	14"	20"
Max Treatment Rate:	2.78 (CFS)	7.74 (CFS)	9.72 (CFS)	13.21 (CFS)
Bypass Radius:	6"	10"	12"	18"
Bypass Flow:	15.48 (CFS)	25.65 (CFS)	29.24 (CFS)	42.55 (CFS)

Product Overview:

The TRITON CPS (Connector Pipe Screens) were designed to be installed in front of a catch basins outlet pipe. This allows stormwater entering the catch basin to be filtered before exiting through its lateral pipes.

CPS's utilizes the catch basins as part of the capturing device, allowing for more debris volume capacity.

The CPS is designed to capture gross solids larger than 5 mm within the catch basin itself, making it an excellent filter for trash capture.

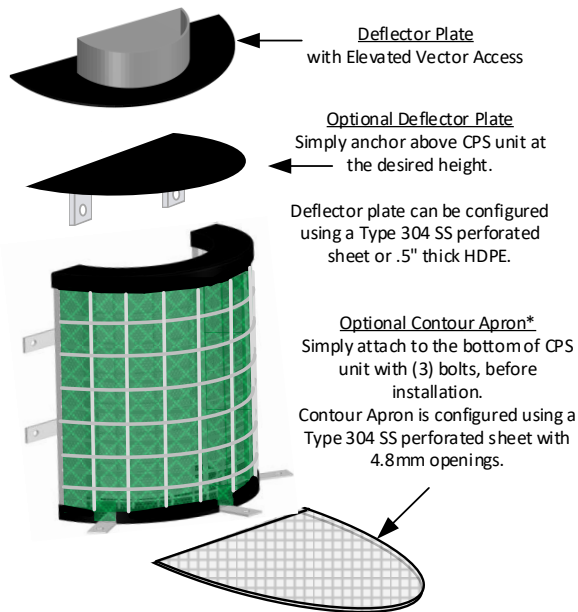
All CPS's have built in overflow / bypass systems to help prevent against flooding if filter becomes blinded.

Trash and debris are trapped within the catch basin allowing for easy maintenance.

TRITON CPS are both easy to install and affordable solution for trash capture requirements.

Notes:

- Units are constructed using Type 304 10ga. Stainless Steel inner and outer housing support for added structural integrity.
- CPS Stainless Steel housing and additional attached SS parts are spot welded.
- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- UV Resistance (ASTM D 4355 - 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- Removable crescent tops are constructed utilizing over 90% recycled ABS Plastic.
- Multiple units can be mounted vertically to increase capture capacity.
- CPS unit is capable of housing an absorbent media if ever required, with no retrofitting or modifications needed.
- CPS unit can also be elevated off the basin floor in "Sump" type basins.
- Custom sizes and configurations are available.
- **Made in the USA.**



Deflector Plate with Elevated Vector Access

Optional Deflector Plate

Simply anchor above CPS unit at the desired height.

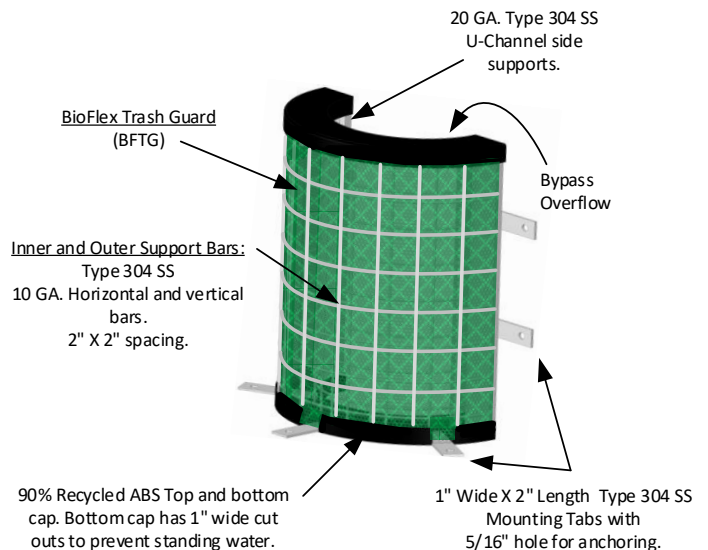
Deflector plate can be configured using a Type 304 SS perforated sheet or .5" thick HDPE.

Optional Contour Apron*

Simply attach to the bottom of CPS unit with (3) bolts, before installation.

Contour Apron is configured using a Type 304 SS perforated sheet with 4.8mm openings.

*Anchor to contoured floors where needed.



BioFlex Trash Guard (BFTG)

Inner and Outer Support Bars: Type 304 SS 10 GA. Horizontal and vertical bars. 2" X 2" spacing.

20 GA. Type 304 SS U-Channel side supports.

Bypass Overflow

90% Recycled ABS Top and bottom cap. Bottom cap has 1" wide cut outs to prevent standing water.

1" Wide X 2" Length Type 304 SS Mounting Tabs with 5/16" hole for anchoring.



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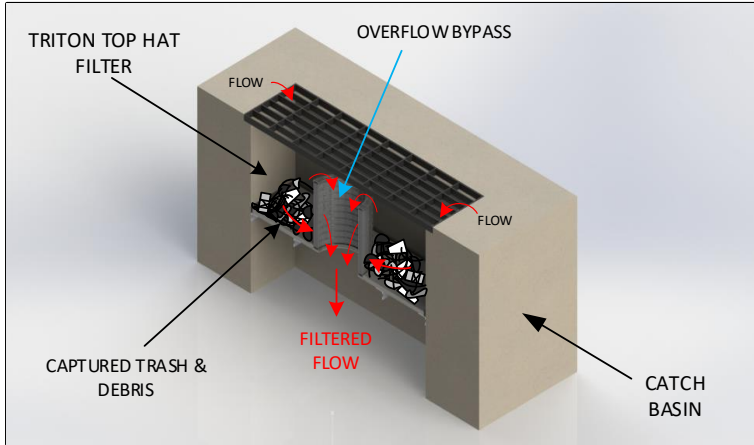
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REM TRITON TOP HAT – BFTG - FTC

Product Overview:

REM's TRITON – Top Hat Filters were designed to provide a highly adaptable solution that allows the flexibility to maximize the filter treatment flow rate and pollutant debris capturing capacity. This multipurpose design allows the system to be installed in many different catch basin configurations. Top Hat Filters are designed to capture sediment, trash, debris, suspended solids, and other storm water pollutants. They may be utilized in new construction or retrofitted in existing catch basin structures. They are sized to spec or modified in the field for drains with unusual dimensions and unique frame and grates. The Bioflex (BFTG) Media is designed to capture debris, trash and sediment while sustaining very high treatment rates. Mesh density of 3.5 ounces per square foot minimizes occlusion and blinding while capturing 100% of particles at 5mm or greater in size. Filter Cartridges may be easily removed when servicing. Media strategy may be optimized for specific pollutant concerns.

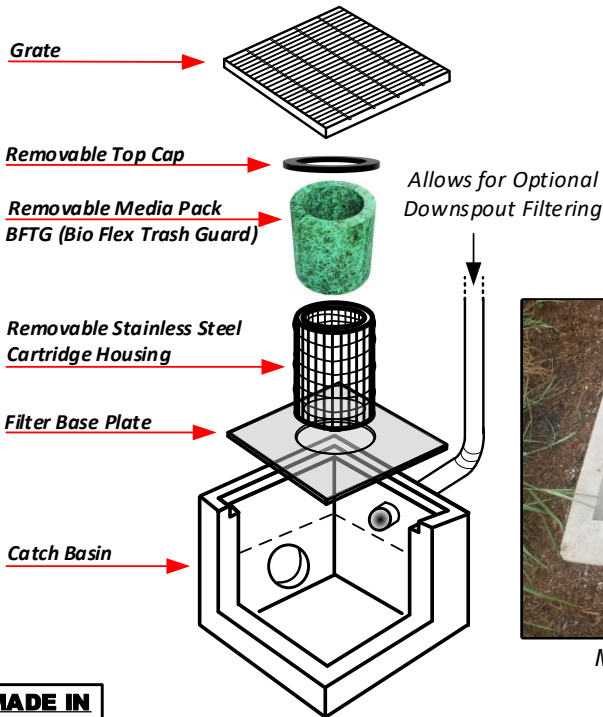


Standard Size Dimensions (Not all model and sizes are listed here)

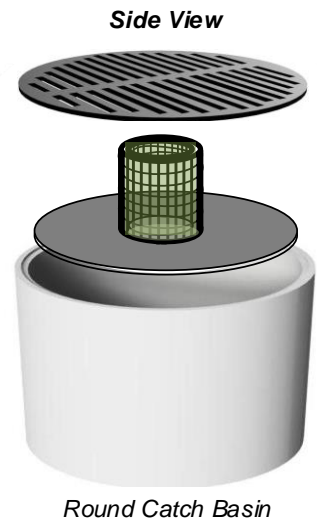
Model:	TR1818-TH	TR2436-TH	TR24RD-TH	TR36RD-TH
Width:	17.5" X 17.5"	34.5" X 23.5"	23.5" Dia.	35"
Cartridge Height:	8"	8"	12"	16"
Cartridge	TR10-CART(8)	TR14-CART(8)	TR14-CART(12)	TR14-CART(16)
Cartridge Diameter:	10" Dia.	14" Dia.	14" Dia.	14" Dia.
Max Treatment Rate:	.84 (CFS)	1.57 (CFS)	2.96 (CFS)	3.86 (CFS)
Bypass Flow:	5.14 (CFS)	13.15 (CFS)	13.15 (CFS)	13.15 (CFS)

Notes:

- Base plates are constructed using High Density Polyethylene Plastic (HDPE).
- Filter cartridge housings are constructed utilizing Type 304 13ga. Stainless Steel, with 2" welded square openings.
- Removable cartridge tops and bottoms are constructed utilizing over 90% recycled ABS Plastic.
- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- REM TRITON filter cartridges can be removable for ease of cleaning and maintenance.
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- UV Resistance (ASTM D 4355 - 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Made in the USA.
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.
- **Made in the USA.**



Model: TR3636-TH Installed



Round Catch Basin



Side View



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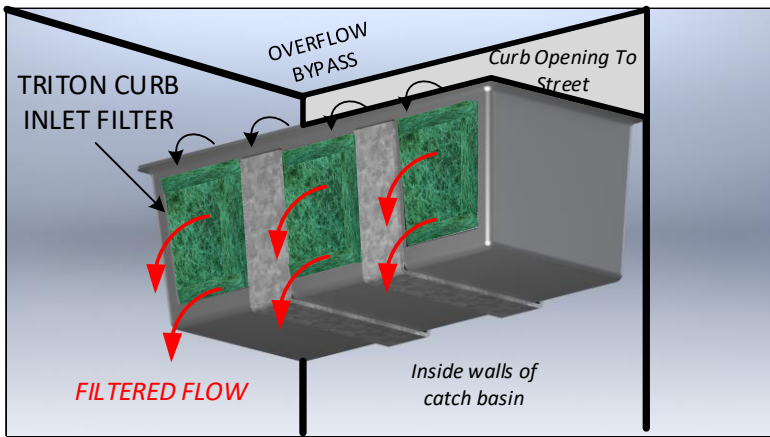
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REM TRITON CURB INLET – BFTG - FTC

Product Overview:

REM designed the TRITON -TRC (Curb Inlet) Filter Series to provide a highly adaptable solution that allows the flexibility to maximize the filter treatment flow rates and pollutant capturing capacity. TRITON -TRC Filters may be utilized in new construction or retrofitted in existing catch basin structures. They are sized to spec and scalable for all different lengths of curb inlets. Bioflex (BFTG) Media is designed to capture debris, trash and sediment while sustaining very high treatment rates. Mesh density of 3.5 ounces per square foot minimizes occlusion and blinding while capturing 100% of particles at 5mm or greater in size. Filter Cartridges may be easily removed when servicing. Media strategy may be optimized for specific pollutant concerns.



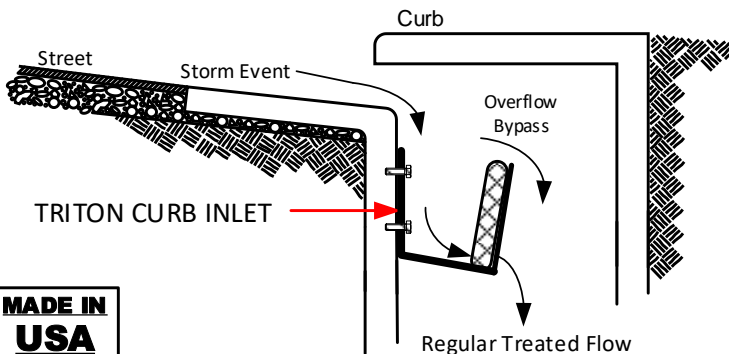
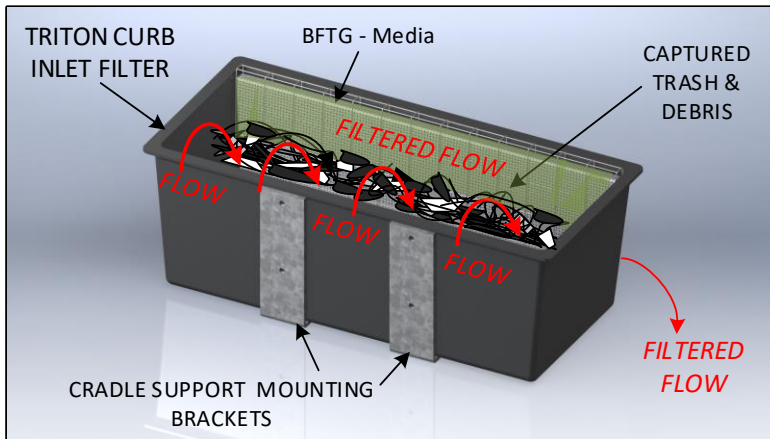
Standard Size Dimensions (Not all model and sizes are listed here)

Model:	TRC2.0	TRC3.5	TRC7.0	TR14.0
Width/Height:	9"/12.5"	9"/12.5"	9"/12.5"	9"/12.5"
Length:	2'	3.5'	7'	14'
Max Treatment Rate:	.82 (CFS)	1.93 (CFS)	3.88 (CFS)	7.74 (CFS)
Bypass Flow:	*8.35 (CFS)	*14.24 (CFS)	*28.42 (CFS)	*56.35 (CFS)

*Note: Potential overflow bypass will be equal to or greater than the curb opening in the street. Device has a greater area for bypass which is larger than the curb opening.

Notes:

- Filter bodies are constructed using **100% recycled** High Impact Polystyrene plastic (HIPS) with UV inhibitors and rubber additives.
- Filter cartridge housings are constructed utilizing Type 304 13ga. Stainless Steel, with 2" welded square openings.
- Removable cartridge tops and bottoms are constructed utilizing over 90% recycled ABS Plastic.
- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- REM TRITON filter cartridges are removable for ease of cleaning and maintenance.
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- UV Resistance (ASTM D 4355 – 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Made in the USA.
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.
- **Made in the USA.**



Model: TRC21.0 Installed



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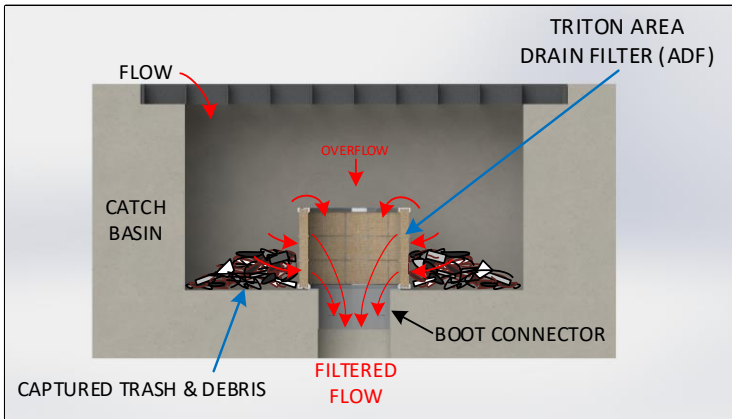
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REM TRITON AREA DRAINS – BFTG - FTC

Product Overview:

REM's TRITON – Area Drain Filters are multipurpose catch basin filters designed to capture sediment, trash, debris, suspended solids, and other storm water pollutants. They may be utilized for roof drains, small area drains, new construction or retrofitted in existing catch basin structures. Area Drain Filters have been designed to be installed in a variety of different applications. Most common are exit pipes that exit vertically through a catch basin or other receiving vessel.

Bioflex (BFTG) Media is designed to capture debris, trash and sediment while sustaining very high treatment rates. Mesh density of 3.5 ounces per square foot minimizes occlusion and blinding while capturing 100% of particles at 5mm or greater in size. Filter Cartridges may be easily removed when servicing. Media strategy may be optimized for specific pollutant concerns.



Standard Size Dimensions (Not all model and sizes are listed here)

Model:	ADF-7	ADF-10	ADF-14	ADF-24
Diameter:	7" Dia.	10" Dia.	14" Dia.	24" Dia.
* Height:	8"	8"	16"	16"
Cartridge	TR7-CART (8)	TR10-CART (8)	TR14-CART (16)	TR24-CART (16)
Bypass	3" Dia.	6" Dia.	10" Dia.	20" Dia.
Max Treatment Rate:	.65 (CFS)	.93 (CFS)	3.40 (CFS)	8.85 (CFS)
Bypass Flow:	1.61 (CFS)	5.14 (CFS)	13.15 (CFS)	51.29 (CFS)

* Some cartridge heights may vary due to configuration of catch basin.

Notes:

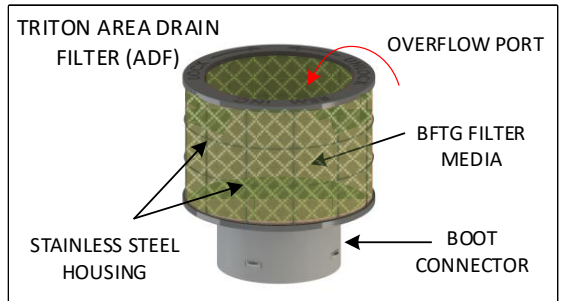
- Filter cartridge housings are constructed utilizing Type 304 13ga. Stainless Steel, with 2" welded square openings.
- Removable cartridge tops and bottoms are constructed utilizing over 90% recycled ABS Plastic.
- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- REM TRITON filter cartridges can be removable for ease of cleaning and maintenance.
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- UV Resistance (ASTM D 4355 – 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Made in the USA.
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.
- **Made in the USA.**



ADF-14 Roof Drain Application



ADF-10 Booted Area Drain Filter



ADF-24 Large Area Drain Application



ADF-4 Booted Area Drain Filter



ADF-4 Area Drain Filter





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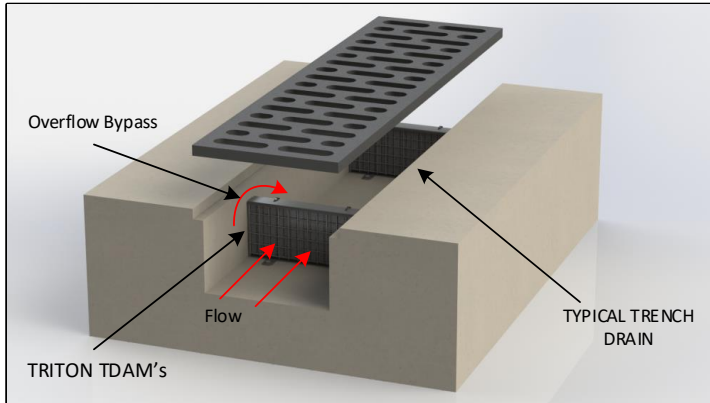
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REM TRITON TDAM - BFTG - FTC

Product Overview:

REM designed the TRITON -TDAM Filter Series to provide a highly adaptable solution that allows the flexibility to maximize the filter treatment flow rates and pollutant capturing capacity in trench drain and shallow type drains applications. Bioflex (BFTG) Media is designed to capture debris, trash and sediment while sustaining very high treatment rates. Mesh density of 3.5 ounces per square foot minimizes occlusion and blinding while capturing 100% of particles at 5mm or greater in size. TRITON -TDAM Filters can be sized to fit most industry standard trench drains, parkway drains, shallow structures, catch basins, etc. They are sized to spec and scalable for all different lengths and applications. Media strategy may also be optimized for specific pollutant concerns.



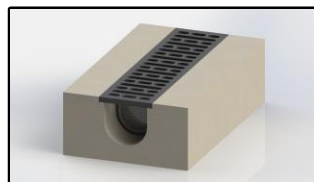
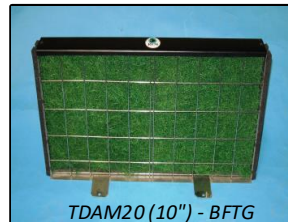
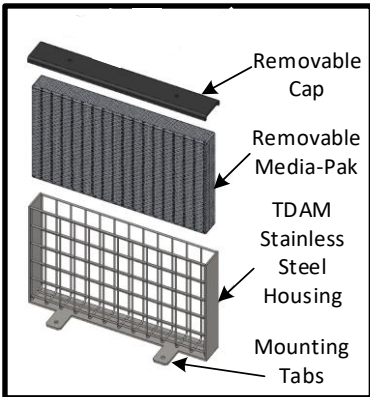
Standard Size Dimensions (Not all model and sizes are listed here)

Model:	TT2	TDAM5(5)	TDAM8(10)	TDAM12(5)
Width:	4"	5"	8"	12"
Height:	4"	5"	10"	5"
Trench Width	4"	5"	8"	12"
Est. Bypass	.44 (CFS)	.55 (CFS)	.88 (CFS)	1.33 (CFS)
Max Treatment Rate:	.02 (CFS)	.17 (CFS)	.52 (CFS)	.40 (CFS)

Note: Potential overflow bypass will depend upon the dept of each trench drain.

Notes:

- TDAM housings are constructed utilizing Type 304 16ga. Stainless Steel, with 1" welded square openings.
- Removable cartridge tops and bottoms are constructed utilizing over 90% recycled ABS Plastic or fiberglass.
- BFTG - Bioflex is constructed using Polyester Fiber Mesh (Netting), a blend of coir fibers (fiber), and water based latex (as the binding agent).
- BioFlex shall be biodegradable and may often be re-used.
- REM TRITON filter cartridges can be removable for ease of cleaning and maintenance.
- Filter designs include a high flow overflow bypass to eliminate pooling or flooding during heavy rain events.
- UV Resistance (ASTM D 4355 - 500 hour exposure)
- Tensile Properties (ASTM D 5035/ECTC).
- Sediment Control (ASTM D 5141).
- Made in the USA.
- Maintenance information and replacement REM Media Packs are available upon request by contacting REM at sales@remfilters.com or (888) 526-4736.
- **Made in the USA.**



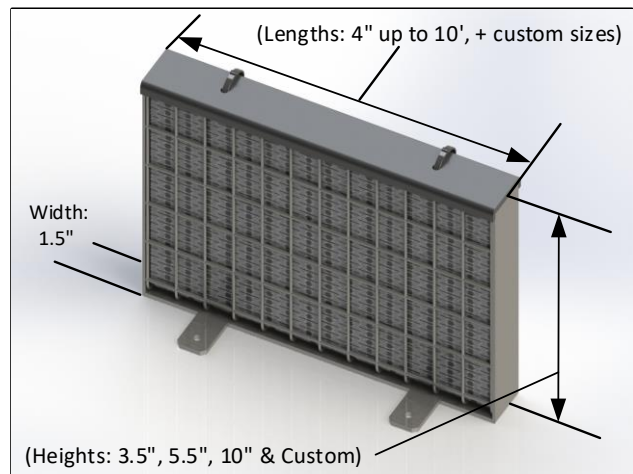
Rounded bottom trench drains.



TDAM (TT2) for rounded bottom trench drains.



TDAM installed



3F: Alternative Configurations

CPS-BFTG-FTC

The CPS-BFTG-FTC Device has an alternative configuration. This device can be installed with out a deflector plate when there would be no incoming water directly bypassing the filter into the overflow port. Please see pictures below for acceptable installation configurations.

No Deflector Plate Needed



When a CPS device can be installed away all incoming water flows, a deflector plate is not necessary. This picture shows a CPS device installed on the street side away from the main flow of the gutter.

Deflector Plate Needed



This picture shows the proper use of a necessary deflector plate being mounted. This will divert the incoming water from the gutter to the front of the filter, which will allow proper debris capture.

3G: Internal Bypass

All of the TRITON BFTG-FTC Filters have built-in overflow bypass systems, this is breached only when the device has become inundated with an excessive amount of debris and the device has reached its debris holding capacity, or during a large storm event that exceeds the hydraulic capacity of the device. Essentially the device would need to be at 100% capacity for the bypass level to be reached.

It is ultimately the responsibility of the engineer and/or deciding party to determine that the correct unit size is appropriate for the selected basin and corresponding flow capacity.

3H: Previously Trapped Trash

With the design of the TRITON Insert-BFTG-FTC, trash should only be re-introduced in a case where the device has reached 100% capacity during normal operating conditions. REM recommends that the devices are cleaned and maintained before or at 50% capacity to ensure proper functionality.

3I: Calibration Feature

These devices do not contain any adjustable calibration features.

3J: Photos



TR20CR12-BFTG-FTC



TR3636-TopHat-BFTG-FTC



TDAM12(5)-BFTG-FTC



TR2436-BFTG-FTC

3K: Material Type

The design and construction of the TRITON INSERT-BFTG-FTC is comprised of the following materials; Type 304 stainless steel, 90% recycled content ABS plastic cap with UV Inhibitors or a fiberglass cap. The main housing and structural support body is made up of an inner and outer wall of 13 GA. Type 304 stainless steel welded mesh with 2" X 2" square openings. The filter housings are comprised of 100% recycled HMWPE (High Molecular Weight Polyethylene) and the BFTG, which is a three-dimensional woven natural fiber media with a mesh netting.

3L: Design Life

Under normal operations and with the impact of large storm events, the TRITON INSERT-BFTG-FTC has an estimated lifespan of 20+ years. Naturally occurring elements and mineral saturation do not have a resounding effect on either the stainless steel, HMWPE, fiberglass or the ABS used in construction. The BFTG filter element is recommended to be replaced annually or as needed.

Section 4: Installation Guidance

4A: Device installation procedures and considerations



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INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: INSERT – BFTG - FTC

(Designed for Square and Round catch basins and other applications)

Step 1)

If your TRITON Insert Filter has been pre-cut for you, simply remove the grate, clean any debris that is found on the ledge that the grate rests on.

Step 2)

Place Filter Cartridge inside of unit, and line up with stainless steel screws on the bottom of the cartridge. Press down and twist 1/6th of a turn to lock cartridge in place, making sure filter is snug enough to prevent water from bypassing. Insert filter housing into catch basin as to where the flanges are resting on the grate & frame ledges. Place grate back on catch basin.

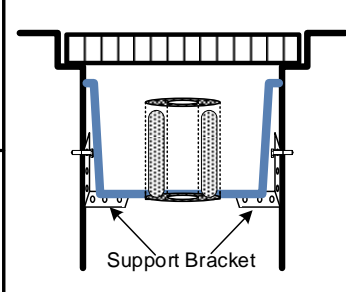
Step 3)

If you received your unit un-cut, trim the flanges of the filter to be 1/2" smaller than the frame that surrounds the grate on the two support sides. Trim the other two sides that will not be supported to be 1/2" smaller than the clear frame opening, attach the supplied bulb gasket to the non-supported sides and set the Insert Filter into place. Place grate back on catch basin.

Note: Round units will be trimmed to 1/4" smaller diameter than the size of the grate and will not use an attachable bulb gasket.

TOOLS REQUIRED:

- 1) Skil saw.
- 2) Snips.
- 3) Hammer Drill, with 1/4" masonry drill bit.
- 4) Hammer.
- 5) 1/4" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 6) 7/16" Socket Drive.



For units that require to be mounted below the ledge please refer to the following instructions:

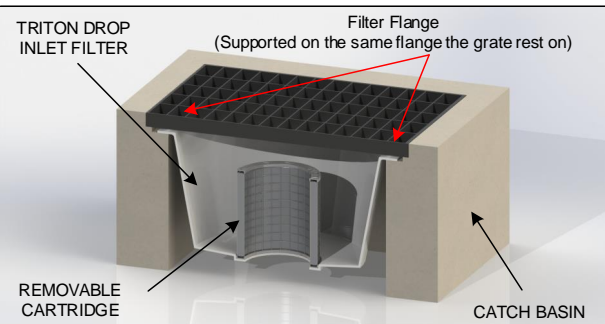
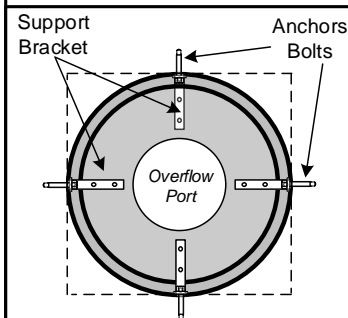
Step #1) If the Insert Filter has not been pre-cut, you will need to measure the Inside dimensions of the catch basin walls to determine the flange size you will need. It should be 1/2" smaller than your I.D. For example, if the Inside Dimensions are 24"X24" you will need to cut your flanges to be 23.5"X23.5".

For round catch basins, measure the inside dimension then cut the filter flange 1/2" Dia., less, then the ID, then apply bulb gasket. Example: 24" Dia. ID, Cut Insert flange to 23.5" Dia.

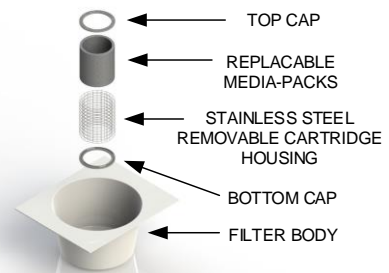
Support Bracket mounting

Determine where the support brackets will need to be placed in the catch basin for best support. To help you do this, place the filter into the catch basin and mark where the center of the support should be. Support brackets should be evenly positioned for filter support. The top of the Insert Filter should rest 2" to 4" below the bottom of the grate.

Using anchor bolts, attach the corner brackets to the inside walls of the catch basin using a hammer drill with 1/4" bit. Make sure anchor bolts are as flush as possible to inside wall. Once the bracket are in place, place Insert Filter into catch basin and place grate back on catch basin.



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INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: CPS INLET – BFTG - FTC

Step 1) CPS (Connector Pipe Screens) have been designed to be placed in front of the downstream exit pipe in a catch basin.

Step 2) Clean bottom of catch basin where the CPS Filter will be installed.

Step 3) Place CPS filter into position. Using a hammer drill with 1/4" masonry drill bit, drill through existing mounting plates pre-drilled holes that are attached to both the bottom and sides of the CPS Filter. Hammer in anchor bolt (Red Head), place washer over plate, then tighten down with nut using a 7/16" socket drive. Some units may or may not require the use of side mounting tabs.

Step 4) If Deflector Plate with Elevated Vector Access or a Deflector Plate is to be installed, position either of them 6" above the top of the CPS Filter. Place the Deflector plate against the wall, 6" above the CPS unit, then using the existing pre-drilled holes in the brackets, mark or drill through the holes used for the anchor bolts. Hammer in anchor bolts, place washer over plate, then tighten down with nut using a 7/16" socket drive.

The Contour Apron is flexible enough to bend to the contour of a sloped catch basin floor. Three to four anchor bolts should be adequate to secure apron to catch basin floor. (See Figure #3)

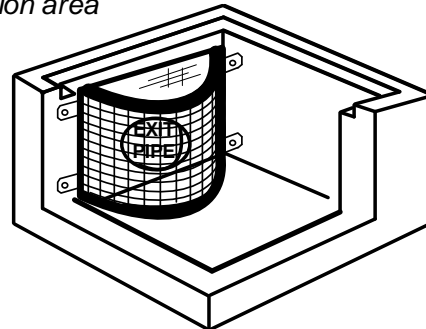
If you need further assistance please call us direct at (888) 526-4736 or email us your questions at: Sales@remfilters.com

TOOLS REQUIRED:

- 1) Hammer Drill, with 1/4" masonry drill bit.
- 2) Hammer.
- 3) 1/4" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 4) 7/16" Socket Drive.

Typical view of installation area

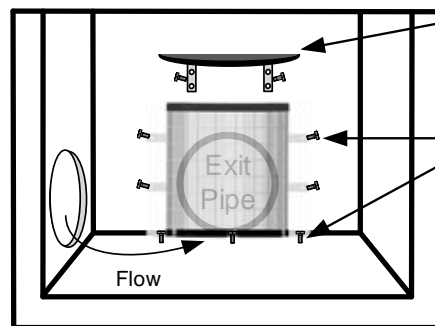
Figure #1



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Typical view of installation area

Figure #2

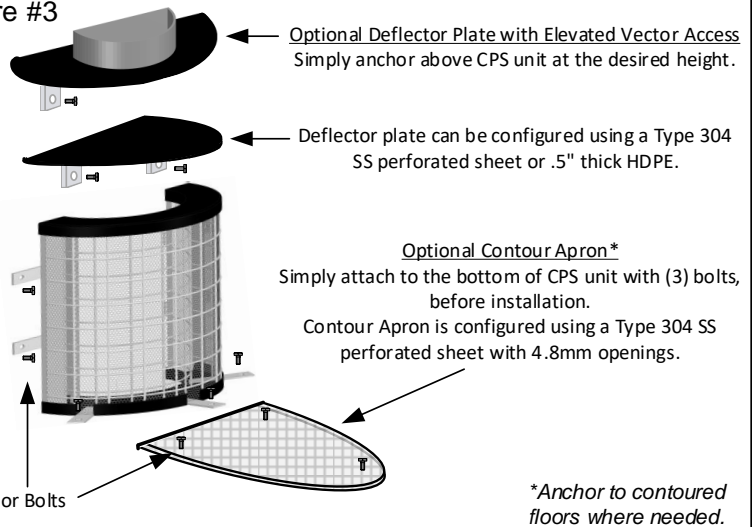


Optional Deflector Plate
To be mounted when needed or required.

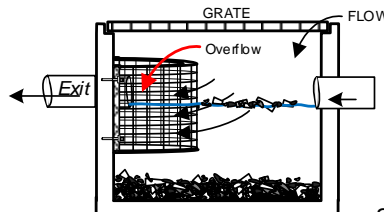
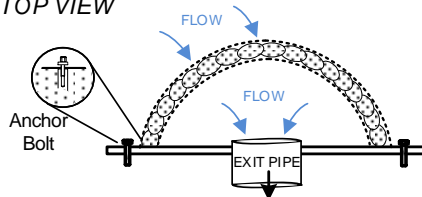
Stainless Steel Mounting Anchors
Simply drill holes for 1/4" anchors

SIDE VIEW

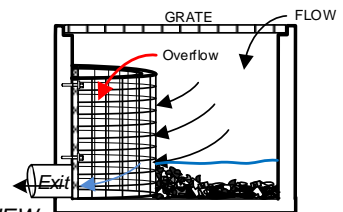
Figure #3



TOP VIEW



SIDE VIEW





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 Southern California 2110 South Grand Avenue Santa Ana, California 92705 P: (714) 557-2676 F: (714) 557-2679

INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: TOP HAT (ROUND) – BFTG - FTC (Designed for Square and Round catch basins and other applications)

Step 1) Filter base plate flanges may need to be trimmed to fit into the throat of the catch basin. For example if the ID or inside throat of the catch basin is 24" Dia., you will want to trim the flanges down to 23.5" Dia. (Taking just a ½" off the dia.) You will then attach the bulb gasket to the outer edge of base plate. This bulb gasket will help seal any gap between the base plate and the inside wall of the catch basin. The gasket is designed to give the base plate a snug fit when installed. Some base plates may be pre-trimmed and ready for installation.

Step 2) Depending upon the filters cartridge configuration the support brackets will vary with the height of each cartridge height. For the 8" Tall Cartridges, the brackets should be mounted 10" or more below the grate seat. For 16" Tall Cartridges, mounting brackets should be at least 19" or more below the grate seat (See attached Side View illustration below).

Step 3) Attach support brackets (Corner and slotted angle, if applicable) to the catch basin throat wall on four to eight sides equally spaced using anchor bolts. Attach slotted angle crossbars for larger catch basins (see Top View illustration below).

Step 4) Install filter base plate first without cartridge attached. Once a tight fit along the inside diameter of the catch basin is obtained, attach the cartridge and replace grate.

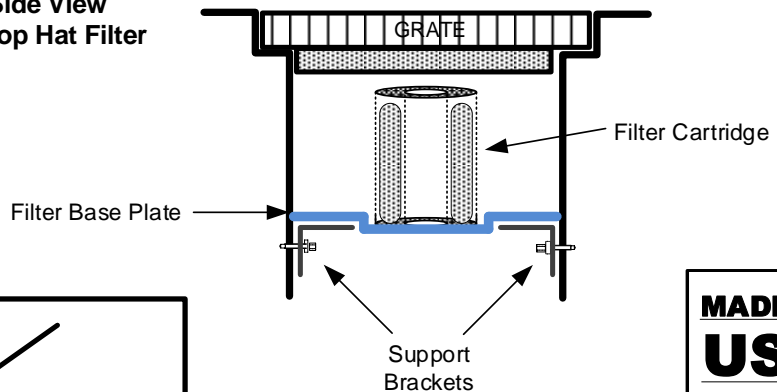
Note: For catch basins that may have a tighter throat due to the frame and grate or other obstruction near the top, the filter base plate may come in two sections that can be un-assembled, which will allow the base plate to be re-assembled below this area. These parts will come assembled, so that you know how they should look like when installed.

If you need further assistance please call us direct at (888) 526-4736 or email us your questions at: Sales@remfilters.com

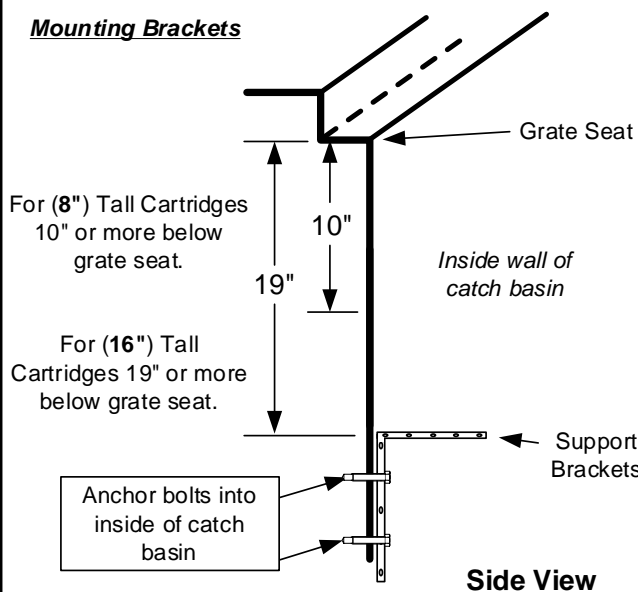
TOOLS REQUIRED:

- 1) Skil saw.
- 2) Snips.
- 3) Hammer Drill, with ¼" masonry drill bit.
- 4) Hammer.
- 5) ¼" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 6) 7/16" Socket Drive.

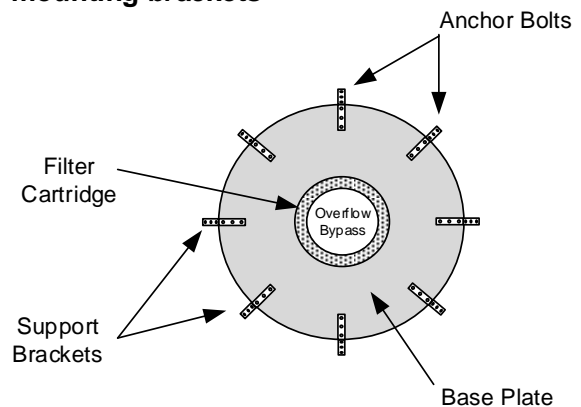
Side View Of Top Hat Filter



Mounting Brackets



Top View Of mounting brackets





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INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: TOP HAT (SQAURE) – BFTG - FTC
(Designed for Square and Round catch basins and other applications)

Step 1) Filter base plate flanges may need to be trimmed to fit into the throat of the catch basin. For example if the ID or inside throat of the catch basin is 24" X 24", you will want to trim the flanges down to 23" X 23". You will then attach the bulb gasket to the outer edge of base plate. This bulb gasket will help seal any gap between the base plate and the inside wall of the catch basin. The gasket is designed to give the base plate a snug fit when installed. Some base plates may be pre-trimmed and ready for installation.

Step 2) Depending upon the filters cartridge configuration the support brackets will vary with the height of each cartridge height. For the 8" Tall Cartridges, the brackets should be mounted 10" or more below the grate seat. For 16" Tall Cartridges, mounting brackets should be at least 19" or more below the grate seat (See attached Side View illustration below).

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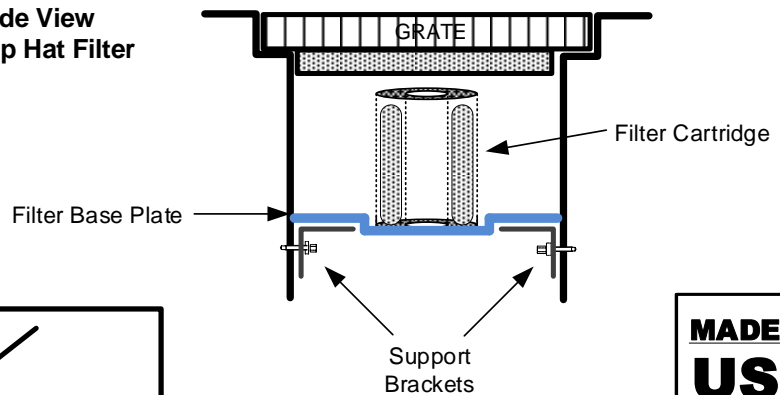
Note: For catch basins that may have a tighter throat due to the frame and grate or other obstruction near the top, the filter base plate may come in two sections that can be un-assembled, which will allow the base plate to be re-assembled below this area. These parts will come assembled, so that you know how they should look like when installed.

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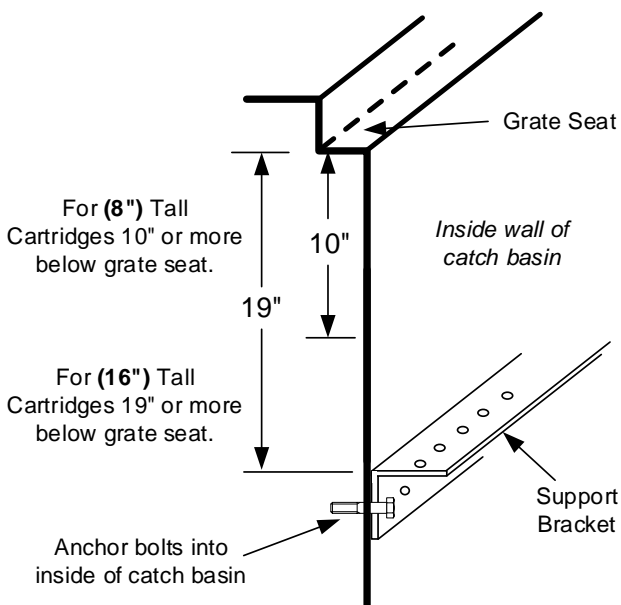
TOOLS REQUIRED:

- 1) Skil saw.
- 2) Snips.
- 3) Hammer Drill, with 1/4" masonry drill bit.
- 4) Hammer.
- 5) 1/4" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 6) 7/16" Socket Drive.

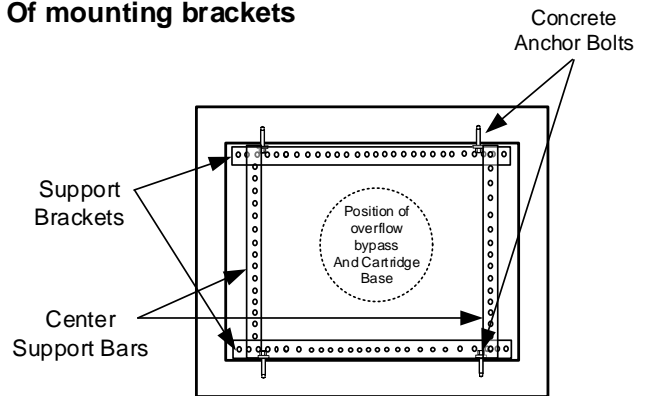
Side View Of Top Hat Filter



MADE IN USA



Top View Of mounting brackets





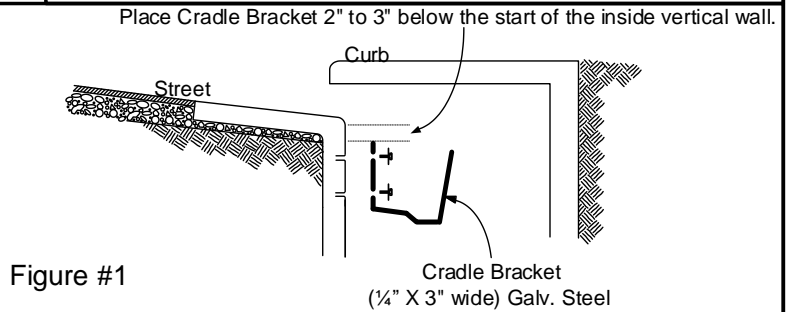
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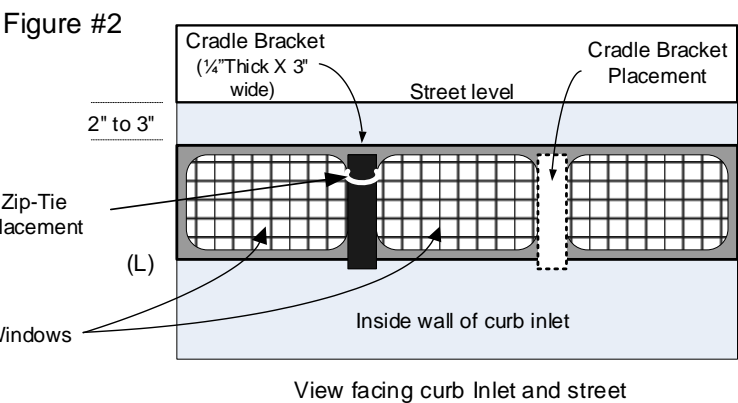
INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: CURB INLET - BFTG - FTC

Step 1) While inside of the curb inlet catch basin, starting from the left side wall to the right side wall of the curb inlet catch (while facing the street) Place Curb Inlet Filter 2" to 3" below the start of the inside vertical wall. Mark the height on the wall.

Note: If the curb inlet is larger than 3.5', you will be using additional section of filter. Joint Couplings will also be supplied to connect the section together (See Figure #3) Each filter section should come with two Cradle Brackets.



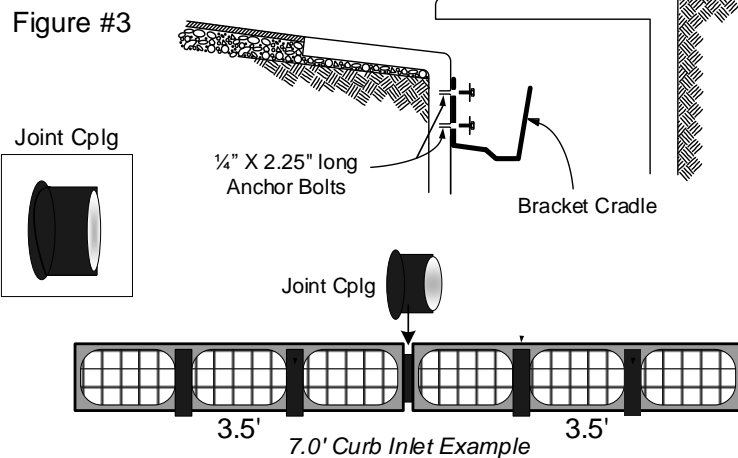
Step 2) Determine where the Cradle Brackets are to be placed horizontally along the inside wall. The bracket should be placed in between the windows of the curb inlet filter. For a 2' Curb Inlet section with only one window, the brackets will go on the two ends. (They should not block any of the open areas of the windows. Having the cradle brackets in position against the wall, mark the location using the existing mounting holes in the bracket as a template. These are where the holes are to be drilled to mount the brackets. Drill two holes per bracket using 1/4" masonry drill bits to install the concrete anchors. Secure cradle brackets to wall using 7/16" socket driver.



Step 3) Once the two cradle brackets are installed, place the Curb Inlet Filter into the cradle brackets. Attach zip ties around cradle brackets and filter.

Step 4) When adding adjacent sections, duplicate steps #1, #2, and #3, installing from left to right making sure all sections are at the same height. After installing the first two sections, place the black ABS Joint Coupling (Provided) into both adjoining filter ends, then lock coupling into place by using set screws (pre-drilled into coupling)

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INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: AREA DRAINS – BFTG - FTC

Note: Area Drain Filters have been designed to be installed in a variety of different applications. Most common are exit pipes that exit vertically through a catch basin or other receiving vessel. There are two ways of securing Area Drain Filter into position.

Option A) If filter has been designed using a boot to connect to catch basin, it is simply pushed into place like a compression fitting. Before doing so, clean the bottom of the catch basin where the filter will be placed. Note: confirmation of exit pipe size is necessary so that the Area Drain Filter is fitted with the correct boot size.

Option B) If filter has been designed using a tab mounting system, place Area Drain Filter directly over exit pipe and center. Make sure to clean the bottom of the catch basin where the filter will be placed first. Using a hammer drill with 1/4" masonry drill bit, drill through existing mounting plates pre-drilled holes that are attached to both the bottom and sides of the Area Drain Filter. Hammer in anchor bolt (Red Head's), place washer over plate, then tighten down with nut using a 7/16" socket drive.

If you need further assistance please call us direct at **(888) 526-4736** or email us your questions at: **Sales@remfilters.com**

TOOLS REQUIRED:

- 1) Hammer Drill, with 1/4" masonry drill bit.
- 2) Hammer.
- 3) 1/4" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 4) 7/16" Socket Drive.

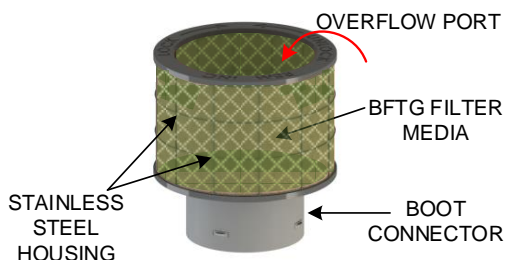


Figure #1

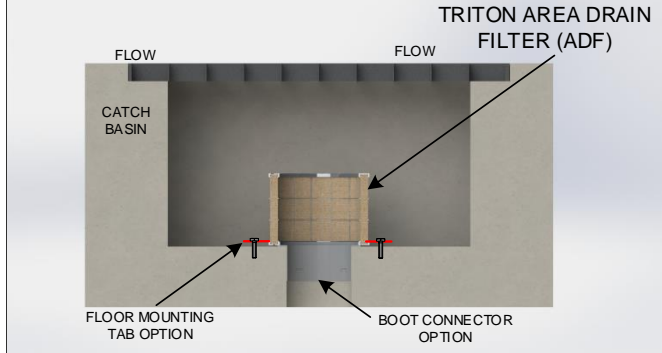


Figure #2

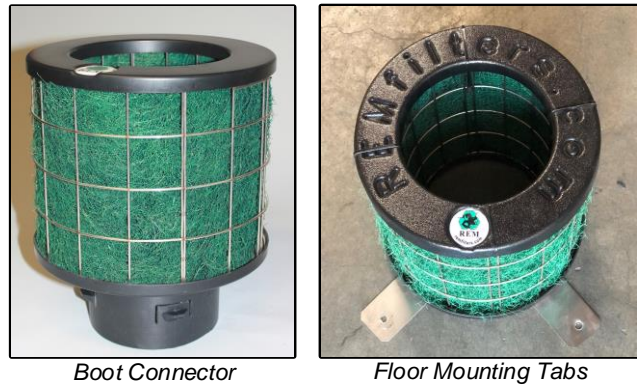
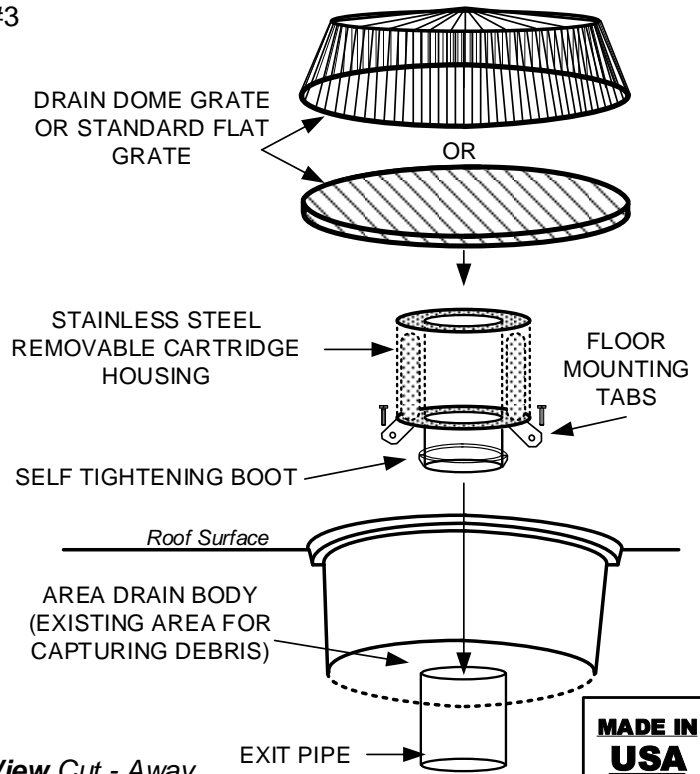


Figure #3



Side View Cut - Away



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TOOLS REQUIRED:

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- 3) 1/4" X 2" or 3" Concrete Anchors. i.e. (Red Head)
- 4) 7/16" Socket Drive.

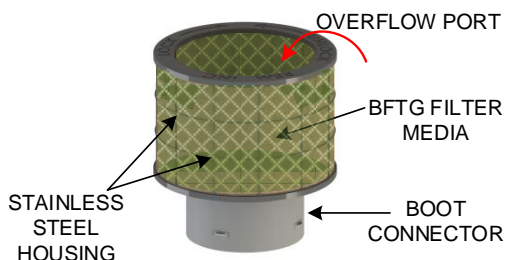


Figure #1

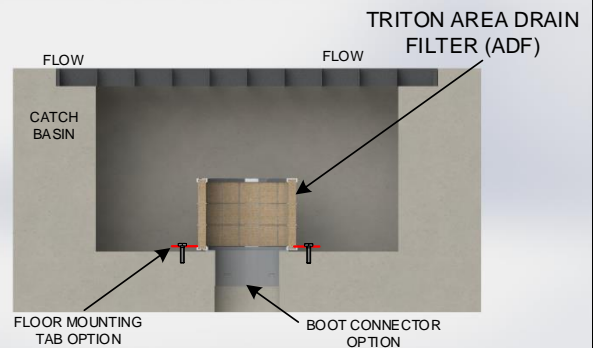


Figure #2

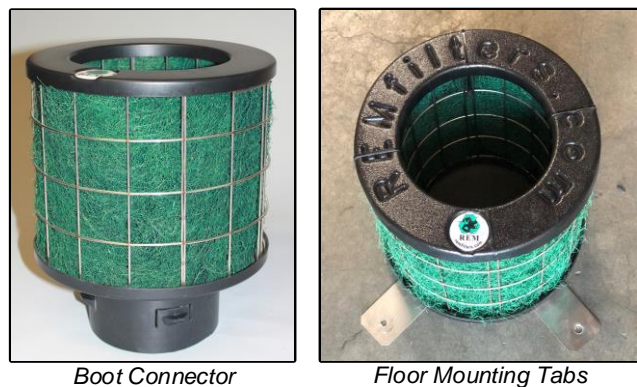
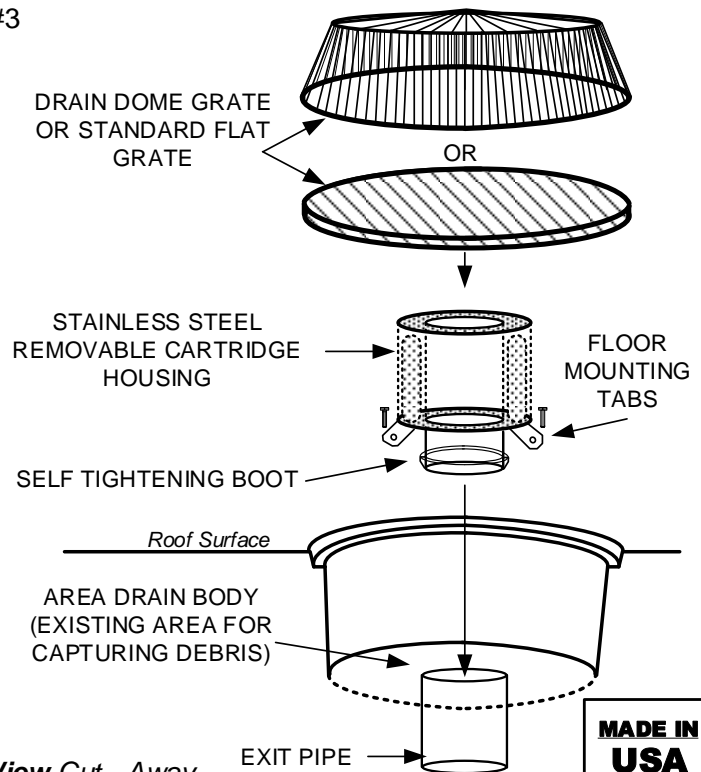


Figure #3



Side View Cut - Away

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4B: Description of installation limitations and non-standard installation procedures

One of the common limitations found in the field are catch basin that are too shallow, or the infrastructure is not conducive for a standard Insert filter. We can filter many different types of configurations, but sometimes modifications or custom units are needed to properly capture the target contaminant. When we come across unusual drains, our approach is to always maximize the given catch basin configuration with the largest volume capturing ability. This may lead to a filter that will need to be customized to fit. Typical modifications that may be needed are trimming the devices housings, cutting down the size of the filter, or adding attachments like an extension of stainless steel or HMWPE depending on the device and model type.

4C: Methods for diagnosing and correcting installation errors

A visual assessment can be done to determine if the device has not been installed correctly. If needed, the device can simply be removed by lifting and removing the device or removing the anchor nuts and then removing the device. Proper re-installation can take place at that point. All filters should be level and firmly in place. Filters are designed to hold a large amount of trash and sediment, which requires the filters to be well supported. If there is any weakness in the support of the filter, more support will of course be needed. There should also not be any gaps where water can bypass the system during normal storm events. TRITON BFTG – FTC Filters have been designed for their ease of installation. If anyone does have installation problems they may call our offices and will be glad to help. 1 (888) 526-4736

Section 5: Operation and maintenance information

5A: Device inspection procedures and frequency considerations

Each device inspection can be done visually, remove the grate/manhole if needed and assess if the unit is damaged, at what capacity, or experienced a bypass event. REM recommends that devices not on a standard maintenance schedule be inspected 3 times per year or more if needed.

5B: Maintenance frequency considerations due to capacity at various volumes

REM recommends that devices be maintained 3 times per year, or as outlined by the governing body. It is recommended that devices do not reach more than 50% capacity without a maintenance event. This frequency is dictated by the loading capacity at each particular drain as well. If not properly maintained, devices will reach 100% capacity and begin the bypass event for debris entering the catch basin. If filters are consistently above 50% full, REM recommends additional maintenance intervals.

5C: Maintenance procedures

Secure area (Traffic and pedestrian controls, if needed). Pull grate and set aside. Remove (VAC) debris that has been captured in system. Pressure washing may also be necessary in some cases to remove certain debris. After system has been cleaned. Visually inspect filter for any damaged areas. Take a picture of the cleaned filter for your records. Fill out report if used for the given catch basin. Replace grate. Remove all traffic control devices.

5D: Essential equipment and materials for proper maintenance

The maintenance for the TRITON BFTG-FTC Filters is accomplished for the most part by using an industrial vacuum truck due to the large capture capacity of the devices. Simply remove the grate and begin to remove the captured debris. The device can be brushed or sprayed off if needed. Take note of the amount of debris collected along with the condition of the device. Vacuum Truck, Grate Pick.

5E: Description of effects of deferred maintenance

Typical implications of deferred maintenance consist primarily of debris that will begin to bypass the device because it has reached the full capacity of its limitations. If the device has been properly installed and supported, it should continue to remain in the original placement from the initial installation.

5F: Repair procedures for device components

In the case that a particular component is damaged, it is advised to call our customer service department for repair or replacement options. Please call (888) 526-4736 for repair or replacement issues.

Section 6: Vector Control Accessibility

6A: Date of device submittal to MVCAC

Device Fact Sheet was submitted to MVCAC on 8/2/2021

Device Fact Sheet was APPROVED by MVCAC on 9/7/2021

6B: Description or drawing that demonstrates vector control personnel accessibility

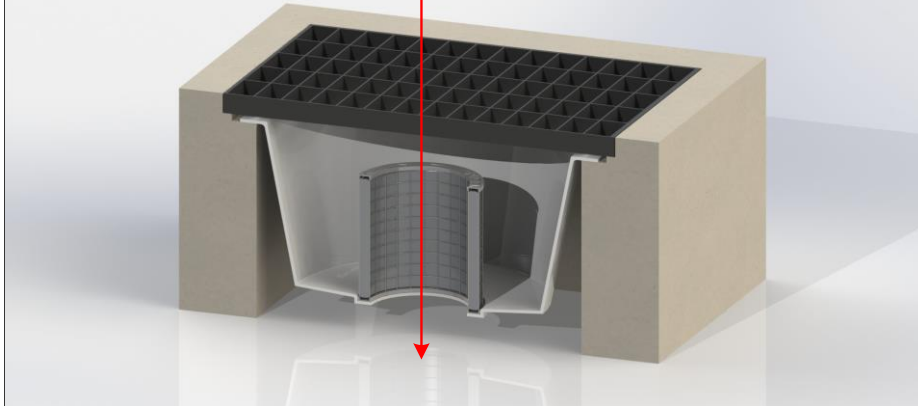
Drawings continued on next page.

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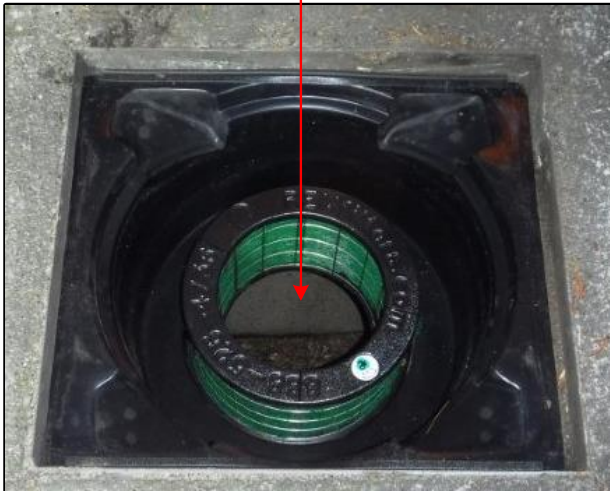
REM Inc.
VECTOR CONTROL ACCESSIBILITY

For Models: INSERT-BFTG-FTC

For Insert Filters, access to bottom of catch basin is done through filters Overflow Port. Clear and direct opening access.

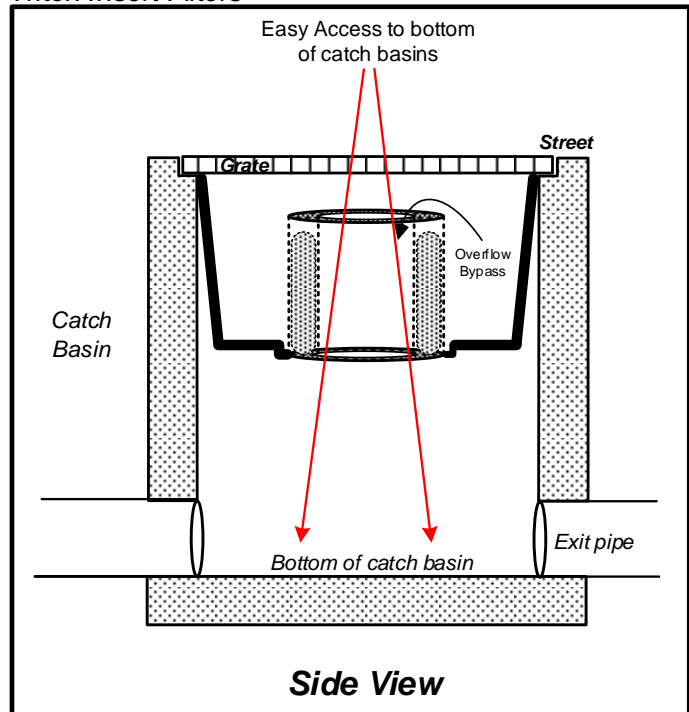


Easy Access to bottom of catch basins



TRITON INSERT FILTER SERIES

Triton Insert Filters



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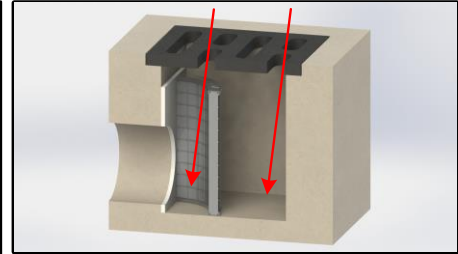
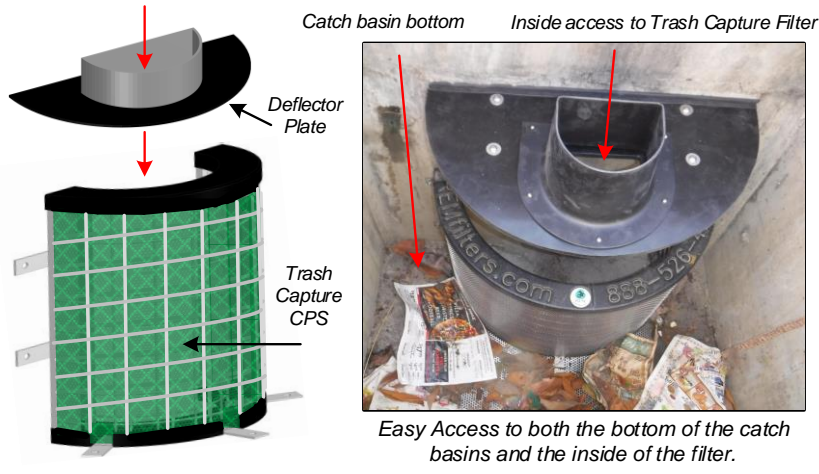


REM Inc.

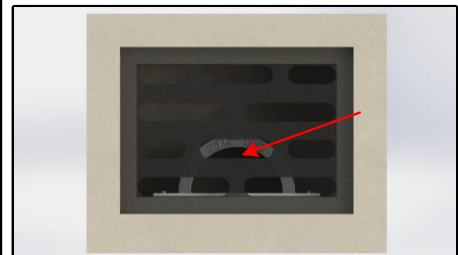
VECTOR CONTROL ACCESSIBILITY

For Models: CPS-BFTG-FTC

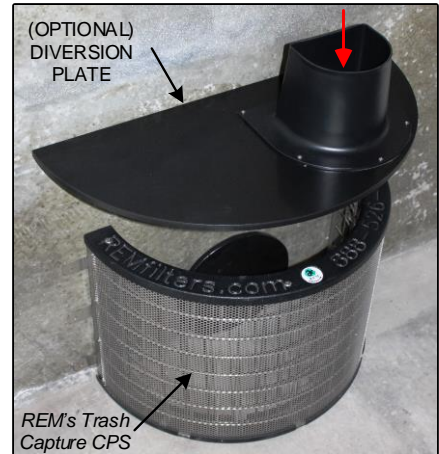
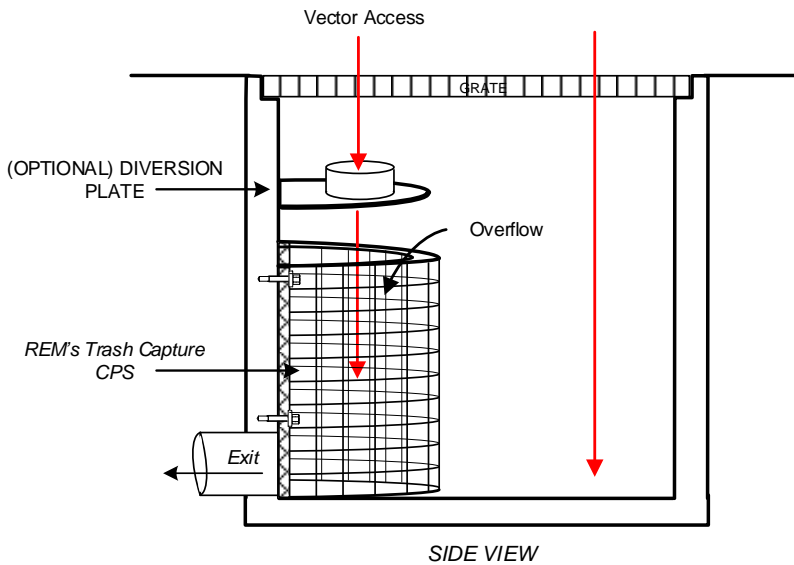
For CPS Filters, access to bottom of catch basin is done through optional Deflector Plate with Elevated Vector Access. Clear and direct opening access.



Side View



Top View



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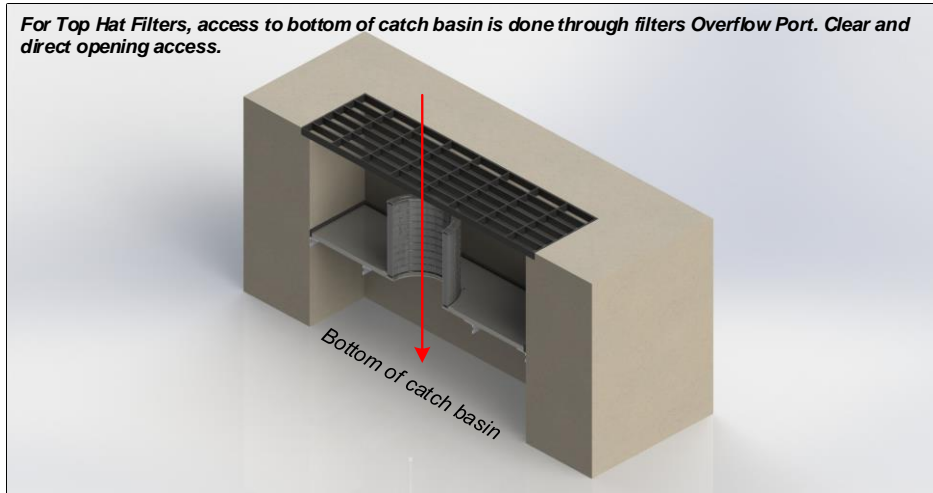
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USA**

REM Inc.
VECTOR CONTROL ACCESSIBILITY

For Models: TOP HAT-BFTG-FTC

For Top Hat Filters, access to bottom of catch basin is done through filters Overflow Port. Clear and direct opening access.

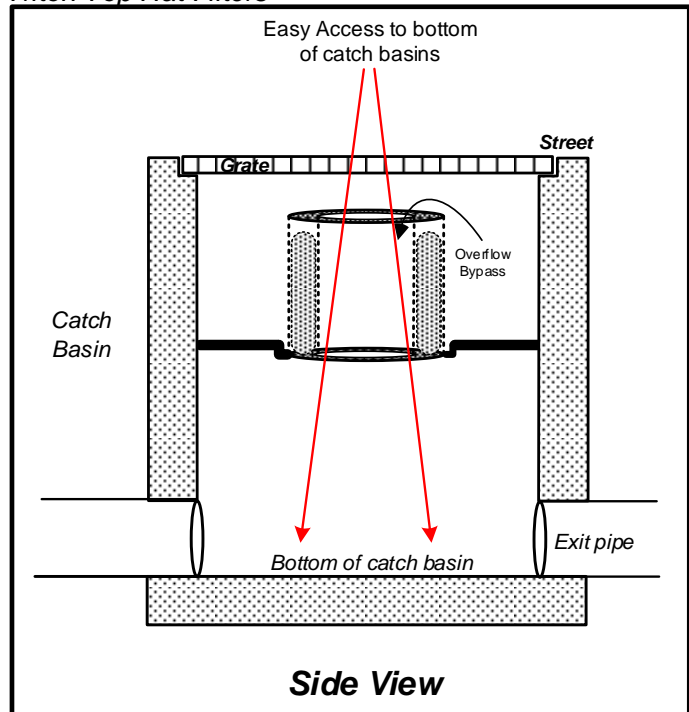


Easy Access to bottom of catch basins



TRITON TOP HAT FILTER SERIES

Triton Top Hat Filters



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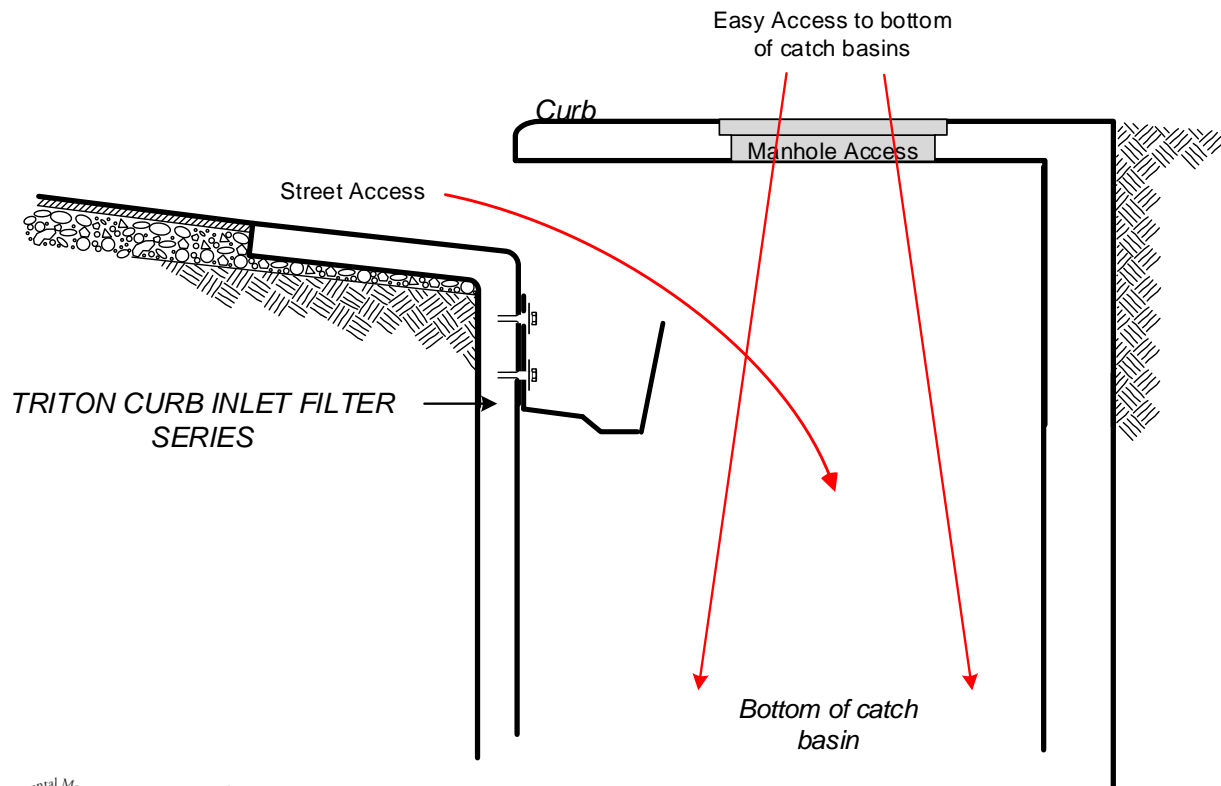
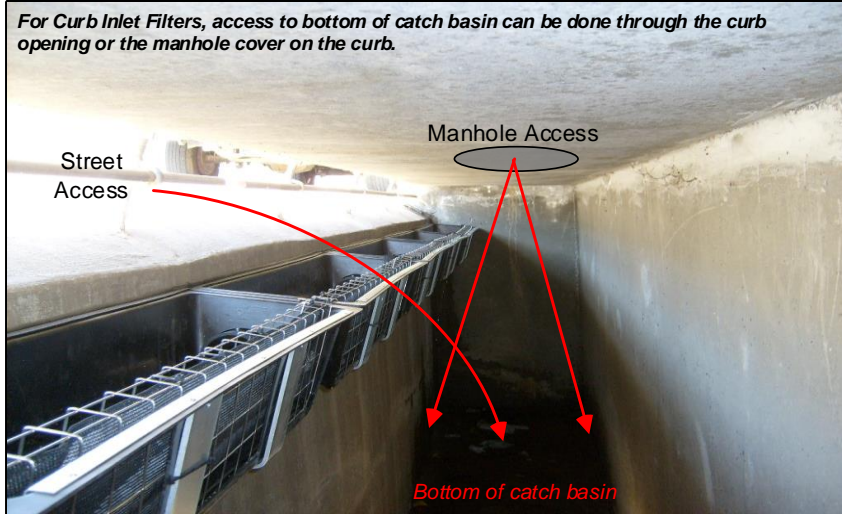
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REM Inc.
VECTOR CONTROL ACCESSIBILITY

For Models: CURB INLET-BFTG-FTC



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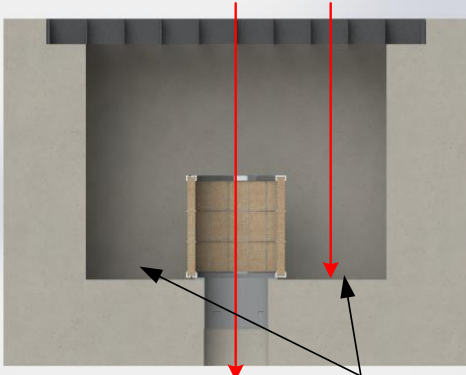
REM Inc.

VECTOR CONTROL ACCESSIBILITY

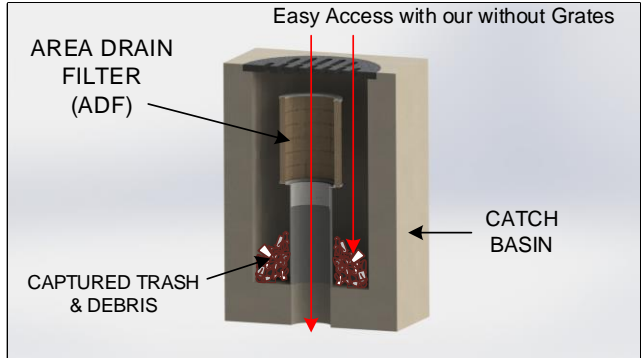
For Models: AREADRAIN-BFTG-FTC

****REM TRITON BFTG Devices have no moving or swinging parts for abatement access. All devices allow a free and clear access to the bottom of catch basin and lateral lines below, as well as notched bottoms to prevent standing water.**

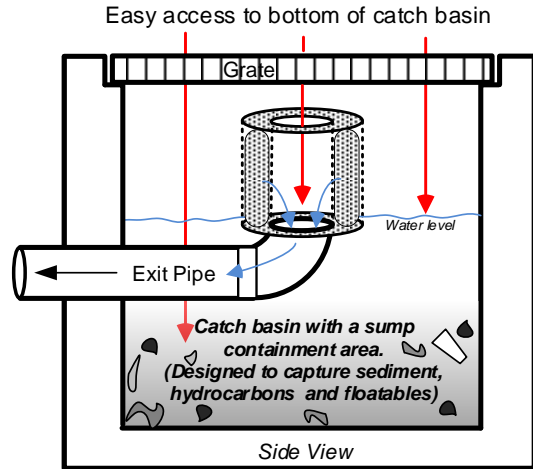
For Area Drain Filters, access to bottom of catch basin is done through both normal access and filter Overflow Port. Clear and direct opening access.



Bottom of Drain



Easy Access with our without Grates

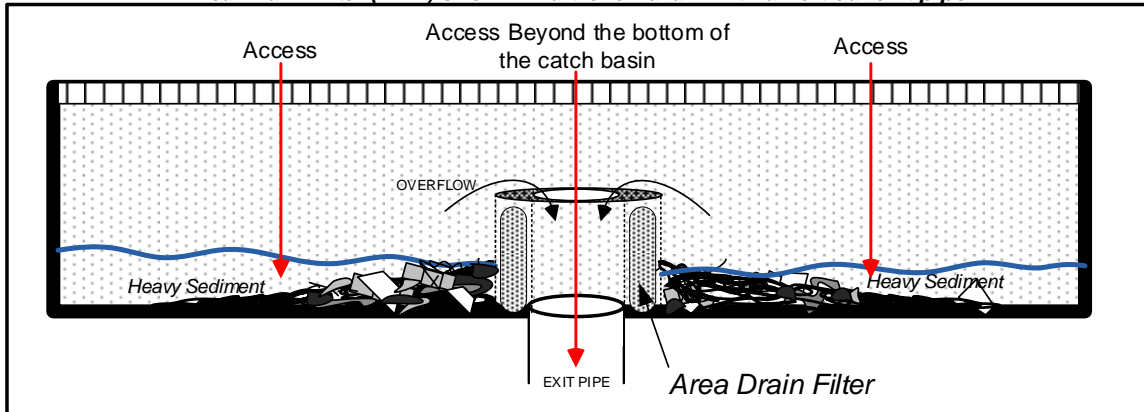


Easy access to bottom of catch basin

Side View



Area Drain Filter (ADF) shown in a trench drain with a vertical exit pipe.



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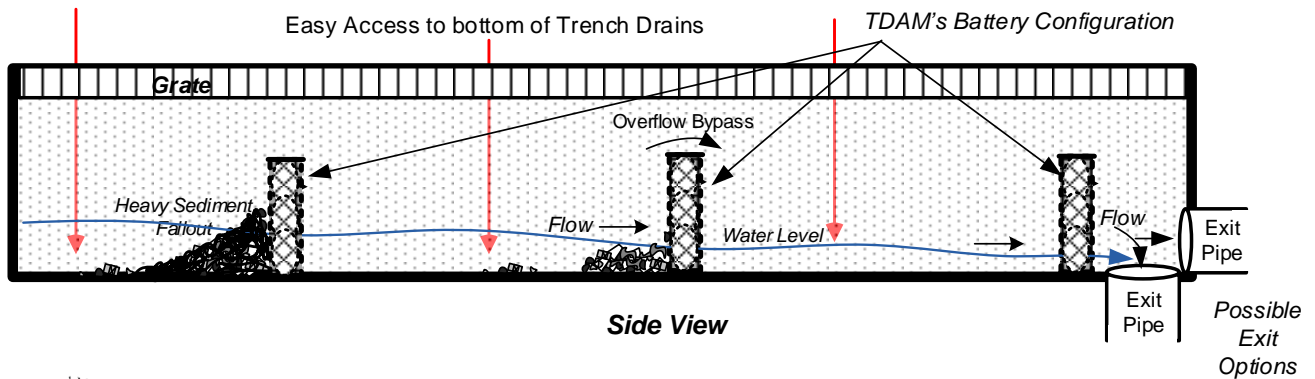
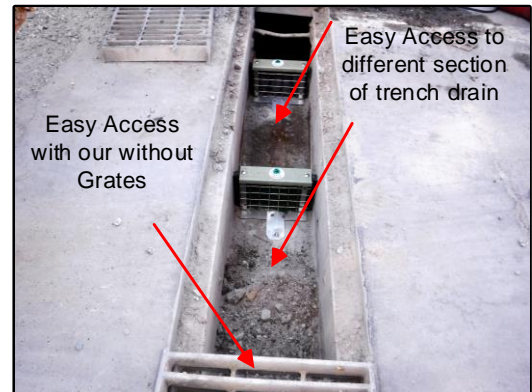
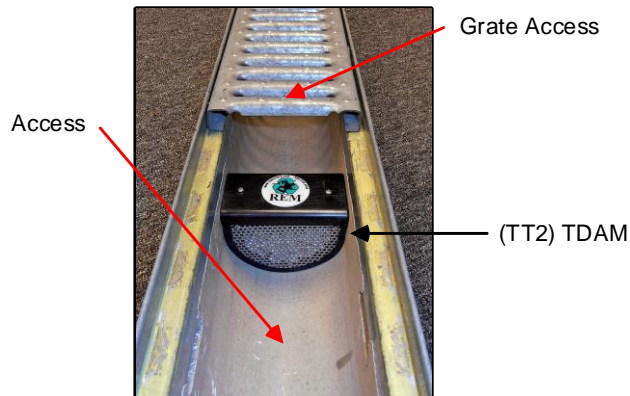
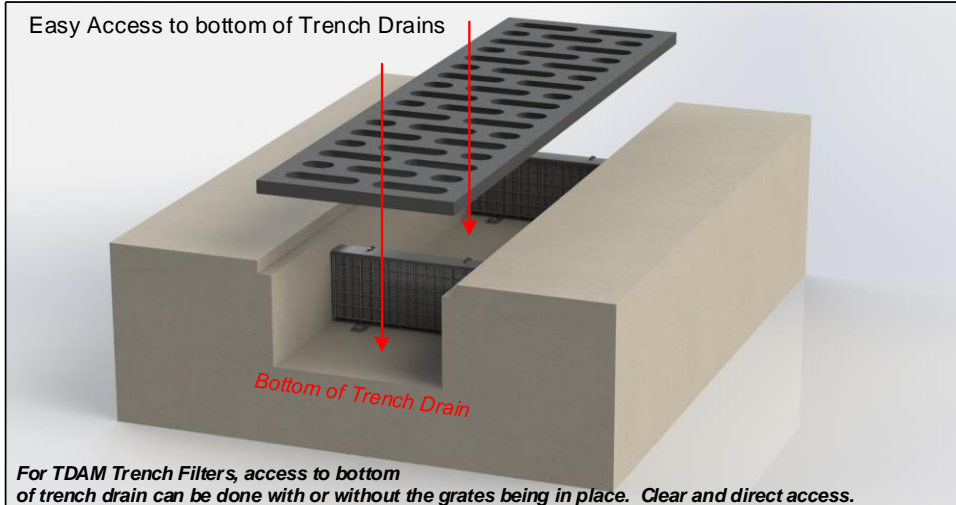
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REM Inc. VECTOR CONTROL ACCESSIBILITY

For Models: TDAM-BFTG-FTC



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6C: Letter of Verification from MVCAC



One Capitol Mall, Suite 800 • Sacramento, CA 95814 • p: (916) 440-0826 • f: (916) 444-7462 • e: mvcac@mvcac.org

Revel Environmental Manufacturing, Inc
960 Detroit Ave. Suite B
Concord, CA 94518

September 7, 2021

Dear Mr. Fleischmann,

Thank you for the submitting the Revel Environmental Manufacturing Inc. Bioflex Trash Guard full trash capture devices for review by the Mosquito and Vector Control Association of California pursuant to the SWRCB Trash Treatment Control Device Application Requirements. The Association has carefully reviewed the conceptual drawings for the Triton Insert, Triton Top Hat, Triton Curb Inlet, Triton TDam, Triton Area Drains, and Triton Connector Pipe Screen devices and verifies that provisions have been included in the designs that allow for full visual access to all areas for presence of standing water, and when necessary, allows for treatments of mosquitoes.

While this verification letter confirms that inspection and treatment for the purpose of minimizing mosquito production should be possible with the Revel Environmental Manufacturing Inc. Bioflex Trash Guard full trash capture devices as presented, it does not affect the local mosquito control agency's rights and remedies under the State Mosquito Abatement and Vector Control District Law. For example, if the installed device or the associated stormwater system infrastructure becomes a mosquito breeding source, it may be determined by a local mosquito control agency to be a public nuisance in accordance with California Health and Safety Code sections 2060-2067.

"Public nuisance" means any of the following:

1. Any property, excluding water, that has been artificially altered from its natural condition so that it now supports the development, attraction, or harborage of vectors. The presence of vectors in their developmental stages on a property is prima facie evidence that the property is a public nuisance.
2. Any water that is a breeding place for vectors. The presence of vectors in their developmental stages in the water is prima facie evidence that the water is a public nuisance.
3. Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors. (Heal. & Saf. Code § 2002 (j).)

Declaration of a facility or property as a public nuisance may result in penalties as provided under the Health and Safety Code. Municipalities and the vendors they work with are encouraged to discuss the design, installation, and maintenance of stormwater trash capture devices with their local mosquito control agency to reduce the potential for disease transmission and public nuisance associated with mosquito production.

Sincerely,

Bob Achermann,
MVCAC Executive Director

Section 7: Reliability information

7A: Estimated design life of device

Under normal operations and with the impact of large storm events, the TRITON BFTG-FTC has an estimated lifespan of 20+ years. Naturally occurring elements and mineral saturation do not have a resounding effect on either the stainless steel, HMWPE, or ABS used in construction.

7B: Warranty information

REM warrants the TRITON BFTG-FTC device for 3 years after the installation date. This includes the device and material itself.

7C: Customer support

For general regional assistance please contact the following REM representatives:

Marcel Sloane
Northern California Regional Manager
960 Detroit Ave. Suite B
Concord, CA. 94518
(888) 526-4736
Marcel@remfilters.com

Bob Marchant
Southern California General Manager
2110 S. Grand Ave.
Santa Ana, CA. 92705
(714) 557-2676
Bobm@remfilters.com

For technical and design information please contact:

Daniel Fagan
Northern California Operations Manager
960 Detroit Ave. Suite B
Concord, CA. 94518
(925) 676-4736
Daniel@remfilters.com

Section 8: Field/Lab testing information and analysis

All Test units were placed in HIGH trash and debris areas within Contra Costa County. Below are results from initial inspections.

*Continued next page.

Photos of three test units previously installed.

