



August 29, 2023
Mr. Leo Cosentini
California State Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812-0100

Dear Mr. Cosentini,

Thank you for providing Fabco Industries Inc. with the opportunity to apply for our device the Expanding StormRing CPS to the California State Water Resources Control Board for certification as a Full Capture System -Trash Treatment Control Device. The Expanding StormRing CPS is a uniquely designed connector pipe screen device which installs onto the inside walls of a catch basin outlet pipe to screen and retain any trash, debris, or particles larger than 5 mm in diameter or greater within the catch basin. The device allows for a flow rate equal to or greater than the peak flow of the storm drain in which it is installed. Provisions have also been made to ensure that Mosquito Vector Control personnel are easily able to inspect the device without needing to lift grates or perform confined space entry. The Ready-Fit StormSack has been installed and successfully protects waterways in stormwater infrastructure projects nationwide, including in California within the cities of Sacramento and Poway.

Within our application below we have spoken to each of the submittal requirements within the Trash Treatment Control Device Certification and Fact Sheet Update Requirements and maintained the requested layout.

Thank you again for your consideration and time taken to review our application. If any additional information is needed, please do not hesitate to contact myself Hilme Athar or our V.P. of Engineering, John Peters. Both of our contact information can be found within the application below.

Sincere regards,

Hilme Athar
Sales Engineer
390 Oser Avenue
Hauppauge, NY 11788
(631) 393-6024
hathar@fabco-industries.com

1. Cover Letter

1.A. Device Name and General Description

The Expanding StormRing CPS is a trash full capture device designed and manufactured by Fabco Industries, Inc. The Expanding StormRing CPS is comprised of four major components, a mounting ring, two transition plates, and a front cover. The StormRing is uniquely designed with an expanding mounting ring feature used to clamp the device to the inside diameter of the existing catch basin outlet pipe. The mounting ring is designed to be inserted into an outlet pipe, where a turnbuckle rod found on the mounting ring can be utilized to expand and lock in place the device. The transition and back plate of the device are then mounted to the ring. Lastly a front cover with perforated aluminum screens and bypass opening is mounted to the back plate. The front cover and top and bottom perforated screens block any trash larger than 5 mm in diameter from flowing downstream, leaving the trash trapped within the catch basin.

1.B. Applicant's Contact Information and Location

Owner Information:

John Peters
V.P. of Engineering
390 Oser Avenue
Hauppauge, NY 11788
(631) 393-6024
johnp@fabco-industries.com

Authorized Representative(s) Contact Information:

Justin Cohen
Senior Project Engineer
390 Oser Avenue
Hauppauge, NY 11788
(631) 393-6024
jcohen@fabco-industries.com

Hilme Athar
Sales Engineer
390 Oser Avenue
Hauppauge, NY 11788
(631) 393-6024
hathar@fabco-industries.com

1.C. Manufacturer's Website Page for Device

<https://fabco-industries.com/pipe-mounted-screening-device/>

1.D. Device's Manufacturing Location

Fabco Industries, Inc.
390 Oser Avenue
Hauppauge, NY 11788
(631) 393-6024

1.E. Brief Summary of Field/Lab Testing Results

The Expanding StormRing CPS is designed to capture trash using aluminum screens with $\varnothing 3/16$ " (approximately $\varnothing 4.8$ mm) round openings. Since the entire surface runoff design flow must flow through the outlet pipe of the catch basin, all trash 5 mm or greater in diameter is physically captured from the peak design flow by the perforated screens of the Expanding StormRing CPS. No lab testing is required as all trash 5 mm and greater in diameter are physically blocked by the screening material from flowing past. Existing installations of the

Expanding StormRing CPS, including project sites in California, have yielded only positive results. All filtered flow rates reported in the hydraulic capacity table (Section 3.C.) have been calculated using the percent open area of the perforated screens, pressure head measured to the bypass of the device, and a standard coefficient of discharge of 0.62 for the orifice equation.

1.F. Brief Summary of Device Limitations, and Operational, Sizing, and Maintenance Considerations

The Expanding StormRing CPS is available in standard sizes for various outlet pipe sizes. Accessibility within an installation site is taken into high consideration and all designs ensure the greatest ease of installation at each site. A mandatory vector control access door is ensured for all Expanding StormRing CPS units installed in California to allow easy access to the inside of the Expanding StormRing CPS by Mosquito Vector Control Personnel without the need for lifting grates or confined space entry.

Regular maintenance is necessary for the Expanding StormRing CPS to function properly. Fabco typically suggests maintenance be scheduled twice a year, but true necessary maintenance frequency will depend on site-specific conditions. The applicable Municipal Stormwater permit may specify more frequent maintenance intervals as well. The filtered flowrate of the Expanding StormRing CPS is designed to completely screen at least the trash treatment peak design flow. In addition, Expanding StormRing CPS units are sized to maintain hydraulic capacity prior to required maintenance as specified in the applicable Municipal Stormwater permit. Fabco Industries recommends the use of a vacuum truck to most easily clean captured trash within the catch basin insert.

1.G. Description, or List of Locations, where Device has been Installed.

Expanding StormRing CPS units have been installed for stormwater management projects throughout California and nationally as well. Below are some example current install sites within the state of California:

Current Install Sites	
Project	Contact
Sacramento, CA	Patrick Murphy Area Sales Manager Ferguson Waterworks, Geo & Stormwater Solutions Phone: 916-402-3210 Email: Patrick.Murphy@ferguson.com
Poway, CA	

1.H. Certification

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.

X

John Peters
V.P. of Engineering
(631) 393-6024
johnp@fabco-industries.com

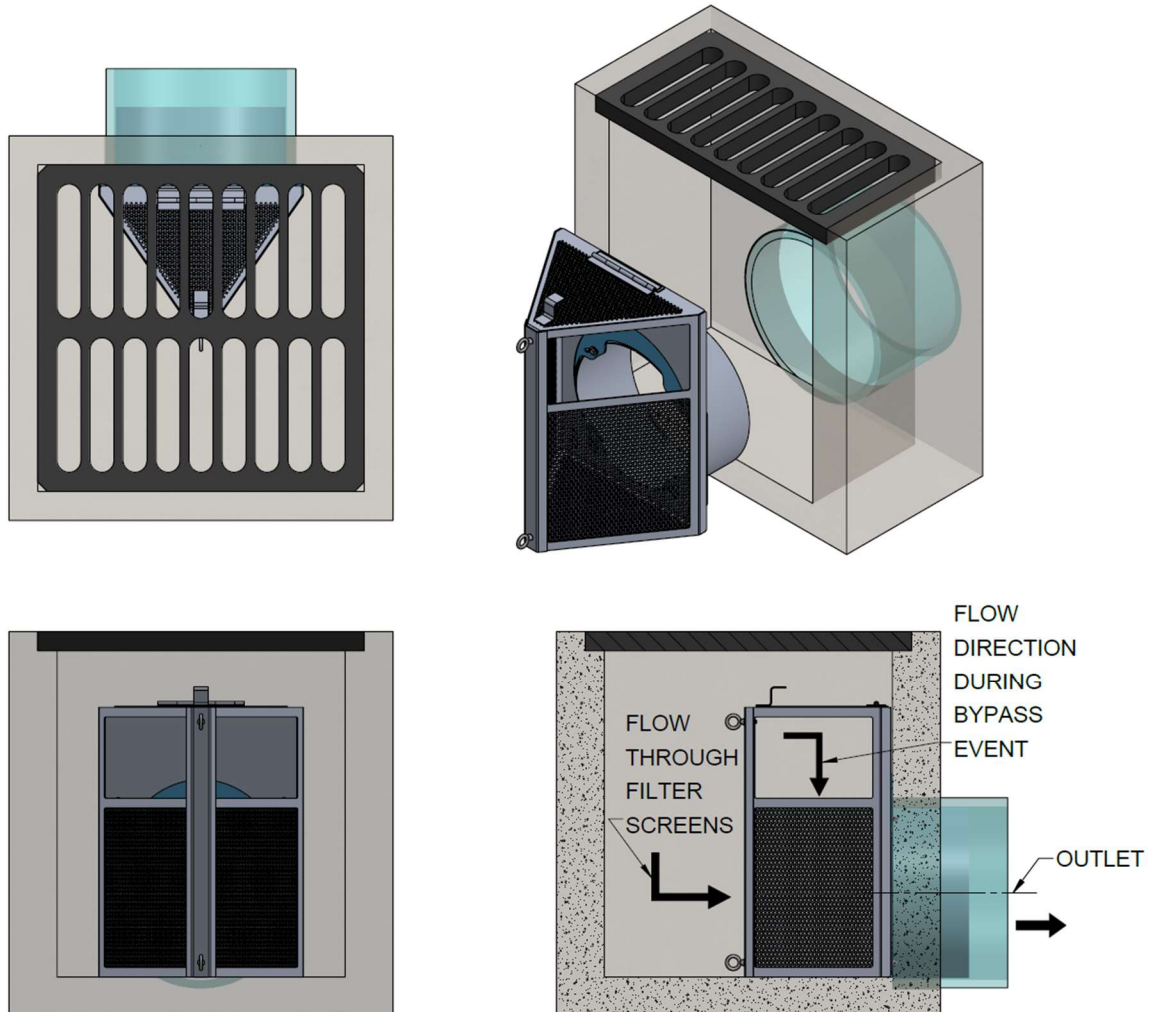
2. Table of Contents

1. Cover Letter	1
1.A. Device Name and General Description	1
1.B. Applicant’s Contact Information and Location	1
1.C. Manufacturer’s Website Page for Device	1
1.D. Device’s Manufacturing Location	1
1.E. Brief Summary of Field/Lab Testing Results	1
1.F. Brief Summary of Device Limitations, and Operational, Sizing, and Maintenance Considerations	2
1.G. Description, or List of Locations, where Device has been installed	2
1.H. Certification	3
2. Table of Contents	4
3. Physical Description	5
3.A. Trash Capture	5
3.B. Peak Flows/Trash Volumes	5
3.C. Hydraulic Capacity	6
3.D. Comparison Table	7
3.E. Design Drawings	7
3.F. Alternative Configurations	7
3.G. Internal Bypass	7
3.H. Previously Trapped Trash	7
3.I. Calibration Feature	7
3.J. Photos	8
3.K. Material Type	9
3.L. Design Life	9
4. Installation Guidance	9
4.A. Standard Device Installation Procedures and Considerations.....	9
4.B. Description of Device Installation Limitations and Non-Standard Device Installation Procedure	11
4.C. Methods for Diagnosing and Correcting Installation Errors	11
5. Operation and Maintenance Information	11
5.A. Inspection Procedures and Frequency Considerations	11
5.B. Description of Maintenance Frequency Considerations	12
5.C. Maintenance Procedures	12
5.D. Essential Equipment and Materials for Proper Maintenance Activities	13
5.E. Description of the Effects of Deferred Maintenance on Device Structural Integrity, Performance, Odors, etc.	13
5.F. Repair Procedures for Device’s Structural and Screening Components	13
6. Vector Control Accessibility	13
6.A. Date of Application Submittal to Mosquito Vector Control Association	13
6.B. Description of Access for Vector Control Personnel	13
6.C. Mosquito Vector Control Association of California Letter of Verification	14
7. Reliability Information	15
7.A. Estimated Design Life of Device Components before Major Overhaul	15
7.B. Warranty Information	15
7.C. Customer Support Information	15
8. Field/Lab Testing Information and Analysis	15
APPENDIX A	16
APPENDIX B	18

3. Physical Description

3.A. Trash Capture

The primary component of the Expanding StormRing CPS that captures trash 5 mm or greater in diameter is the perforated aluminum sheet metal with $\varnothing 3/16''$ (approximately $\varnothing 4.8\text{mm}$) round openings located on the top, bottom, and front cover of the device. During a storm event the entire design flow for a catch basin is directed through the perforated sheet metal protecting the mouth of the outlet pipe, trapping any trash 5mm or greater in diameter within the catch basin. Below is a diagram of the device installed with notes showing how design flow is directed through the device:



3.B. Peak Flows/Trash Volumes

Please see the table within Section 3.C. for the hydraulic capacity of four common standard size Expanding StormRing CPS units. The Expanding StormRing CPS is designed such that the available open area for waterflow through the front cover screens is equal to or greater than the area of the catch basin outlet pipe opening. This ensures that all trash 5 mm or greater in diameter is trapped from the peak design flow of the catch basin. The area of the bypass opening is also designed to be equal to or greater than the area of the catch basin outlet pipe opening. Maximum trash volume for the Expanding StormRing CPS system is dependent on the open volume of the catch basin in which the device is installed.

3.C. Hydraulic Capacity

Expanding StormRing CPS Standard Unit Sizes (Pipe Size)	Hydraulic Capacity					Recommended Max Trash Storage Volume (CF)
	Filtered Flow Rate				Bypass Flow Rate (CFS)	
	Empty (CFS)	25% Full (CFS)	50% Full (CFS)	75% Full (CFS)		
10	2.2	1.4	0.86	0.36	0.95	Maximum Storage Volume will vary with the size of the catch basin that the Expanding StormRing CPS is installed within.
12	2.5	1.7	0.95	0.39	1.3	
15	4.6	3.0	1.7	0.69	2.2	
18	7.7	5.2	2.9	1.1	3.1	

The orifice equation below is used to calculate the hydraulic capacity of each Expanding StormRing CPS Unit:

$$Q = C_d A \sqrt{2gh}$$

where,

Q = flow rate [in^3/s] * converted to [CFS and GPM]

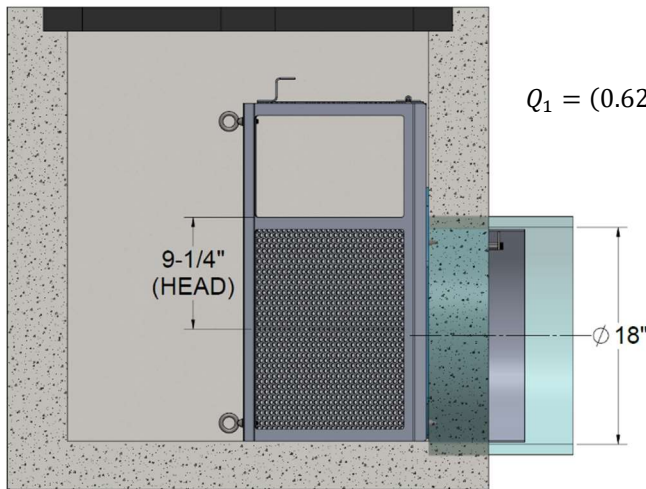
C_d = coefficient of discharge [0.62 used by Fabco Industries]

A = area of orifice/net open area [in^2] = area of front cover screens [in^2] * % open area of perf material

g = acceleration from gravity [in/s^2]

h = head acting on centerline of each screening window [in]

Example Calculation for an Expanding StormRing CPS for $\varnothing 18''$ Pipe:



$$Q_1 = (0.62) * (497[\text{in}^2] * 51\%) * \sqrt{2 * \left(386.4 \left[\frac{\text{in}}{\text{s}^2}\right]\right) * (9.25[\text{in}])}$$

$$Q_1 = 13,286 \left[\frac{\text{in}^3}{\text{s}}\right] \div 1,728$$

$$Q_1 = 7.7 [\text{CFS}]$$

3.D. Comparison Table

Please see table in Section 3.C. for hydraulic capacity of four common sizes of the Expanding StormRing CPS.

3.E. Design Drawings

Please refer to Appendix A for a representative design drawing of an Expanding StormRing CPS for Ø18" Pipe.

3.F. Alternative Configurations

The Expanding StormRing CPS does not have any alternative configurations.

3.G. Internal Bypass

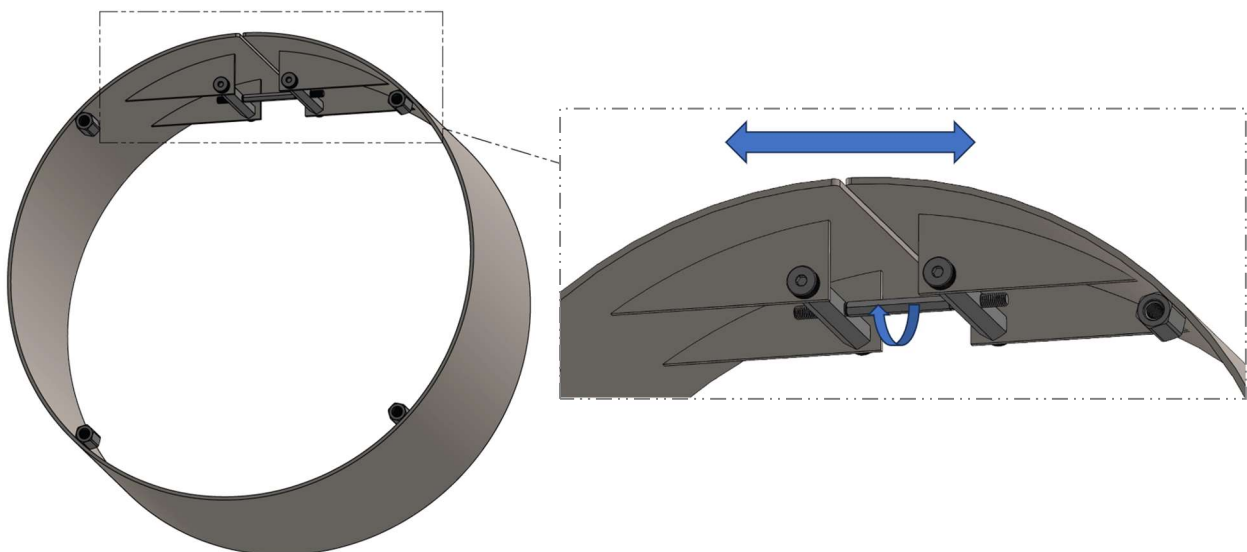
The bypass of the Expanding StormRing CPS is made up of two openings located 1 inch above the front cover screens that allow for flow equal to or greater than the outlet pipe opening. The front screens on the Expanding StormRing CPS are engineered to filter at least the trash treatment peak design flow. Thus, the bypass opening of the Expanding StormRing CPS is only used when flow into the catch basin exceeds the peak design flow or when peak flows occur after the device has not been maintained to keep blinding to a minimum.

3.H. Previously Trapped Trash

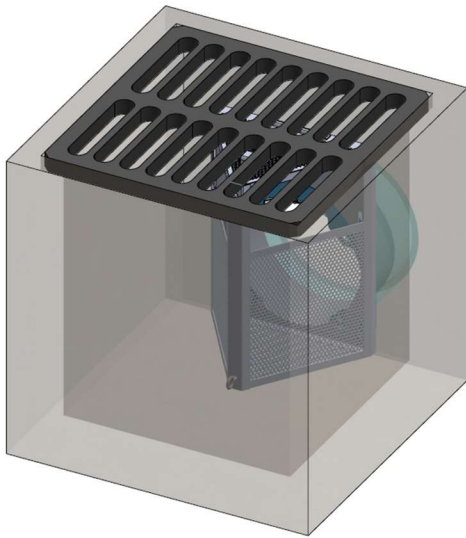
The only scenario in which previously trapped trash can be re-introduced to the downstream stormwater infrastructure when the Expanding StormRing CPS is installed, is if there is floating trash which rises above and through the bypass opening when a bypass flow scenario occurs as explained in Section 3.G.

3.I. Calibration Feature

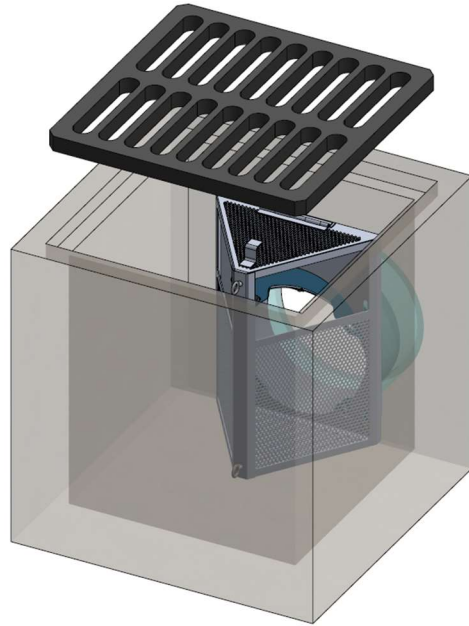
The Expanding StormRing CPS's mounting ring adjusts in diameter using a turnbuckle rod. This feature is used to lock the mounting ring onto the inside walls of the outlet pipe of a catch basin. The back plate of the device also includes slots which can be used to adjust the height of the CPS to fit flush with the floor of the installation catch basin.



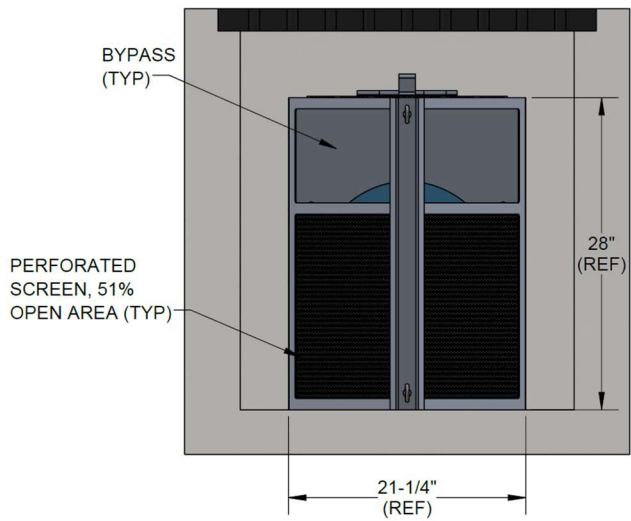
3.J. Photos



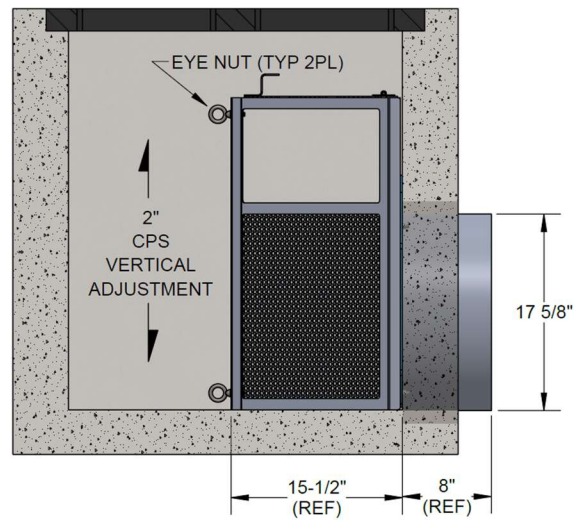
INSTALLED



GRATE LIFTED

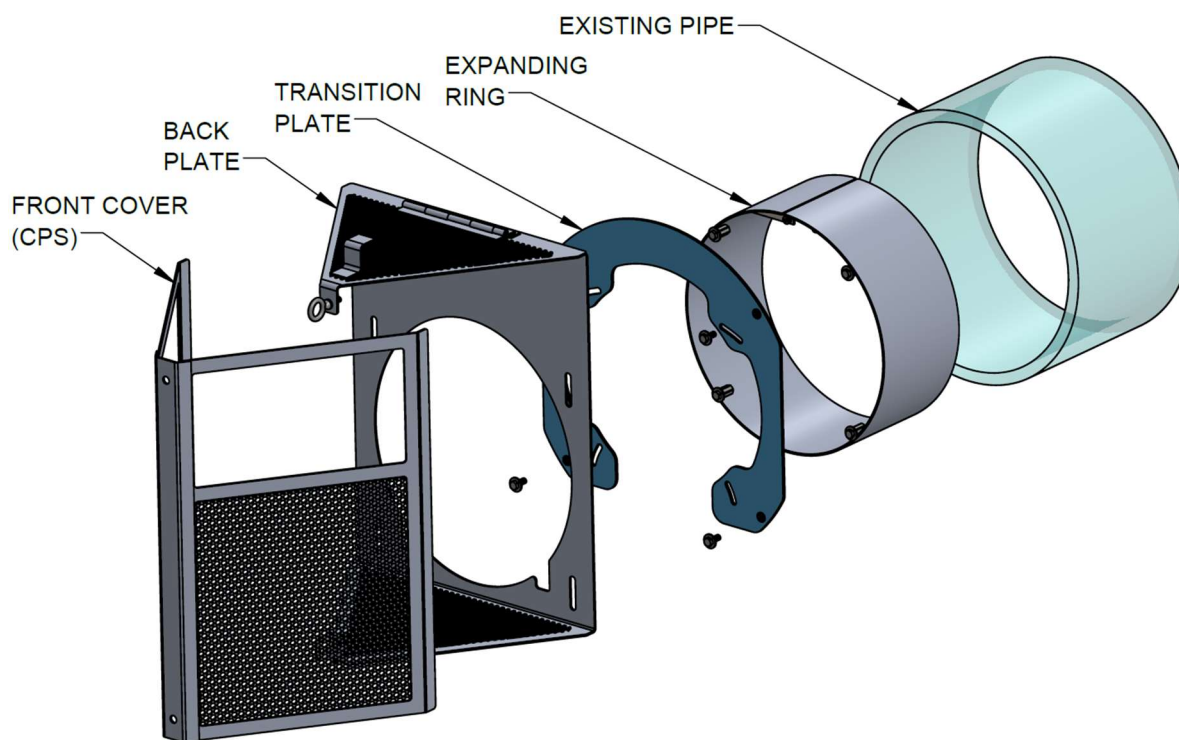


FRONT VIEW



SIDE VIEW

3.K. Material Type



Below is a list of all materials which comprise the Expanding StormRing CPS and where the materials are used on the device:

- Front Cover: Aluminum Sheet Metal
- Back Plate: Aluminum Sheet Metal
- Transition Plate: Aluminum Sheet Metal
- Expanding Ring: Thick Aluminum Sheet Metal
- Filter Screens: Perforated Aluminum Sheet Metal with \varnothing 3/16" holes.
- Vector Control Access Door: Aluminum Sheet Metal
- Hardware: Stainless Steel (SS) Turnbuckle Rod, SS Hex Bolts, SS Washers, SS Eye Bolts.

3.L. Design Life

With expected stormwater conditions and regular maintenance, the Expanding StormRing CPS has an expected design life of approximately 10 years.

4. Installation Guidance

4.A. Standard Device Installation Procedures and Considerations

The Expanding StormRing CPS is designed and manufactured to fit within the specific dimensions of each installation site. Fabco requires that prior to any purchase, a survey form is filled out reporting measurements of the catch basin(s) on site. Additionally, the Expanding StormRing CPS should be installed only by trained individuals who are familiar with local traffic safety regulations and procedures.

Standard installation of an Expanding StormRing CPS requires the following considerations and procedure:

Item Checklist:

		
<input type="checkbox"/> Front Cover, Removable (x1)	<input type="checkbox"/> Back Plate (x1)	
		
<input type="checkbox"/> Transition Plate (x1)	<input type="checkbox"/> Expanding Ring (x1)	
		
<input type="checkbox"/> SS Eye Bolt (x2)	<input type="checkbox"/> 3/8" SS Bolt, 1" Length (x8)	<input type="checkbox"/> 3/8" SS Washer (x8)

Tools Required:

- Wire Brush or Scraper
- 7/16" Socket Wrench
- 9/16" Open Ended Wrench
- Screwdriver

Procedure Steps:

Step 1: Be sure to follow proper road safety rules & regulations when working in the street. Begin by removing the grate or manhole cover from the inlet. Some type of lifting mechanism is highly recommended. Carefully place the grate or manhole cover on the ground away from the work area.

Step 2: Clean and verify that the outlet pipe is free of sediment and/or debris that might inhibit direct contact between the expanding ring and the pipe inside diameter.

Step 3: Align the Expanding Ring with the outlet pipe with the gap located at the 12 O'clock position as shown below.

Step 4: Slide the Expanding Ring fully into the pipe so that the edge is flush with the pipe opening.

Step 5: Using a 9/16" open-end wrench, torque the turnbuckle rod found at the gap of the expanding ring to expand the ring against the inside diameter of the pipe.

- Step 6:** Verify that the ring is firmly secured to the pipe with no rocking or movement in any direction.
- Step 7:** With the Expanding Ring installed, align the Transition Plate slotted holes with the threaded standoffs on the Expanding Ring.
- Step 8:** Plumb and secure the Transition Plate to the Expanding Ring using the 3/8" Bolts and Washers provided.
- Step 9:** Align and attach the Backplate to the Transition Plate using the bolts and washers provided. Ensure the base of the backplate is adjusted vertically downwards to be flush and in contact with the floor of the catch basin.
- Step 10:** The removeable Front Cover attaches directly to the Backplate using the two (2) Eye Bolts provided. The Eye Bolts can be tightened using the screwdriver shaft as a lever. Do not over tighten Eye Bolts.
- Step 11:** After completing the StormRing installation process, resecure the worksite by carefully resetting the storm grate or manhole cover, collecting all tools, safety cones, signage etc. Also, remove any remnant debris that may have accumulated during the installation and that may cause pedestrian or traffic hazards.

4.B. Description of Device Installation Limitations and Non-Standard Device Installation Procedure

Installation of an Expanding StormRing CPS may be limited by the existing protrusions within a catch basin near the outlet pipe. If any non-standard installation is required, the installer should please contact their respective sales representative or Fabco sales support at sales@fabco-industries.com or (631) 393-6024. Installation procedure may differ, but the design of the Expanding StormRing CPS cannot change.

4.C. Methods for Diagnosing and Correcting Installation Errors

Once installed, ensure a proper installation by performing a visual inspection of the entire installed unit. Confirm the device is centered within the catch basin outlet pipe and is securely in place, with no rocking or movement in any direction. If the Expanding StormRing CPS does not fit securely within the catch basin, uninstall the device, clear the outlet pipe, and reinstall the device following the instructions in Section 4.A. If issues persist or critical questions arise during or after installation, the install team should please contact their respective sales representative or Fabco sales support (Email: sales@fabco-industries.com; Phone: (631) 393-6024) for project specific assistance.

5. Operation and Maintenance Information

5.A. Inspection Procedures and Frequency Considerations

To maintain the efficiency of the Expanding StormRing CPS, regular maintenance is necessary. Fabco Industries advises inspecting the unit every six months, following the steps outlined below. In addition, the applicable regulatory permit may specify maintenance frequency. It's important to note that inspection and cleaning should only take place after 24 hours of no rainfall. It's also recommended to periodically examine the surrounding areas for pollutants, such as oil or paint dumping, minor spills, and leaks from dumpsters, and take the appropriate measures to have the source removed.

Below are the standard inspection procedure steps and safety considerations for inspection of the Expanding StormRing CPS:

- Step 1:** If working in the street, proper safety equipment should be worn, including but not limited to a hardhat, vest, gloves and eye protection, and local traffic safety rules & regulations should be followed.

- Step 2:** Begin by removing the storm grate or manhole access cover located over the catch basin structure. Grates can be extremely heavy. Some type of lifting mechanism is highly recommended.
- Step 3:** Allow several minutes for the system to vent.
- Step 4:** Visually inspect all chambers for heavy sediment, trash, and debris loading. A battery powered flashlight or droplight is recommended for thorough inspection.
- Step 5:** Visually inspect the device for any damage or unfastening that may have occurred.
- Step 6:** Use a hook tool or equivalent tool to ensure vector control access door is easily opened.
- Step 7:** Keep a record of inspection, noting any irregularity, damage, or loss of secure mounting.
- Step 8:** Measure the trash load using a tape measure or equivalent trash measurement tool. Some telltale signs that cleaning or replacement is necessary are:
- a. Waterline marks within a couple inches of the top of the bypass weir.
 - b. Standing water in the chamber.
 - c. Cannot see the screen surface area because they are covered with sediment, trash, and debris, etc.
- Step 9:** Record observations and comments on a maintenance log sheet.
- Step 10:** (If necessary) take photos and keep on record.
- Step 11:** Perform vector control inspection and keep records.
- Step 12:** Ensure that the vector control access door is in the closed position.
- Step 13:** Reinstall any removed storm grates or manhole covers.

5.B. Description of Maintenance Frequency Considerations

The Expanding StormRing CPS needs regular cleaning, but determining the appropriate cleaning intervals is not an exact science. Typically, smaller units and installation sites with more sediment or vegetation require more frequent maintenance. Fabco Industries suggests cleaning around the unit(s) at least twice annually by manually removing trash and debris by hand or using a vacuum-assisted device. In situations where there is a greater amount of trash build-up at the installation site, it may be advisable to increase the cleaning frequency of the unit(s) beyond the recommended bi-annual cleaning schedule suggested.

5.C. Maintenance Procedures

Step 1: To access the Expanding StormRing CPS unit, carefully remove the storm grate and place it in a designated safe area. Assess whether removing the front cover of the unit is required for cleaning.

Step 2: For deep cleaning, rinse the filter unit with a high-pressure hose to dislodge and remove sediment and debris that may be clogging the aluminum screens and restricting flow. If a high-pressure hose is not available, a stiff scrub-brush can be used instead.

Step 3: After completing the maintenance work on the Expanding StormRing CPS, ensure that the front cover of the unit is reinstalled correctly if it was removed, and confirm that the device is secure. If required, record any pertinent observations or comments about the maintenance on a maintenance log sheet.

Step 4: As a final step, and before reinstalling the storm grate, be sure to thoroughly clean the work area making sure not to leave behind any tools or objects that may cause a traffic hazard or a pedestrian tripping hazard. Reinstall the storm grate making sure it is seated properly on the frame.

Disposal: Proper handling and disposal of all captured liquid, oils, sediment, debris, trash, and other accumulations from the Expanding StormRing CPS must comply with local, state, and federal regulations. As part of a well-planned and scheduled maintenance regime, disposal considerations should be considered. Generally, solid waste disposal can be arranged with a local landfill, while liquid waste can be disposed of at either a wastewater treatment plant or a municipal vacuum truck decant facility.

5.D. Essential Equipment and Materials for Proper Maintenance Activities

Fabco Industries recommends the following equipment for maintenance of the Expanding StormRing CPS:

- Proper safety equipment including but not limited to hard hats, safety vests, gloves, kneepads, and eye protection.
- Any required traffic control equipment.
- A battery powered flashlight or drop light.
- Shovels and buckets or industrial vacuum.
- Pressure washer (optional).
- Storm grate removal/reinstallation tools.

5.E. Description of the Effects of Deferred Maintenance on Device Structural Integrity, Performance, Odors, Etc.

If maintenance is deferred for the Expanding StormRing CPS, the full trash and debris capacity of the Expanding StormRing CPS can be reached causing a bypass event when a rainstorm occurs. During a bypass event, debris and trash will flow past the Expanding StormRing CPS system and discharge into any downstream stormwater infrastructure or water body. Deferred maintenance will not affect the structural integrity of the Expanding StormRing CPS.

5.F. Repair Procedures for Device's Structural and Screening Components

If during inspection or maintenance of the Expanding StormRing CPS it's found that the device needs repair, photographs and documentation should be sent to the Fabco assistance team at: sales@fabco-industries.com. The Fabco engineering and technical support team can then assess the damage and suggest a repair plan or begin a warranty repair or replacement.

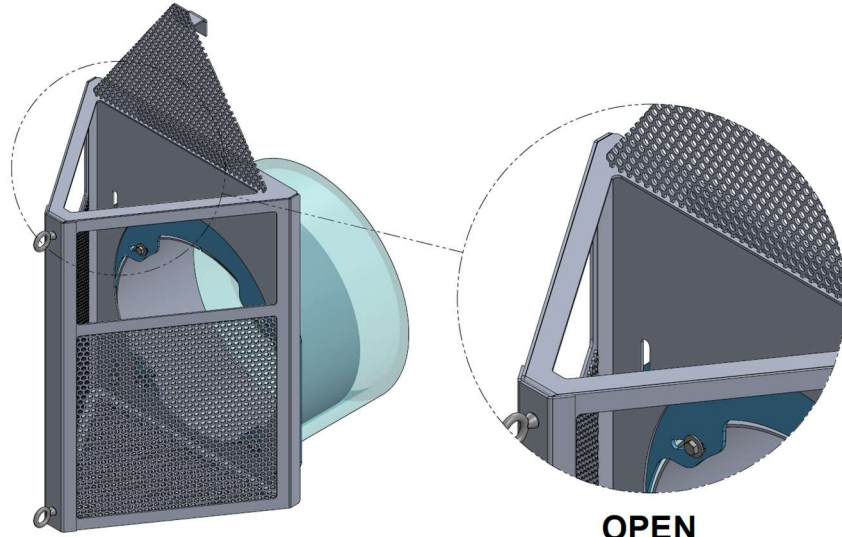
6. Vector Control Accessibility

6.A. Date of Application Submittal to Mosquito Vector Control Association

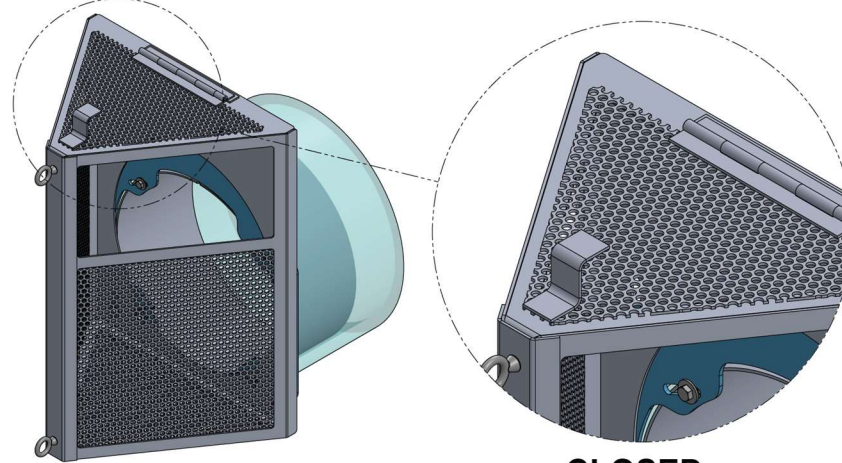
Application to the Mosquito and Vector Control Association of California (MVCAC) for the Expanding StormRing CPS was submitted on August 17th, 2023, and a letter of verification was received on August 28th, 2023. Please see Appendix B for the MVCAC verification letter.

6.B. Description of Access for Vector Control Personnel

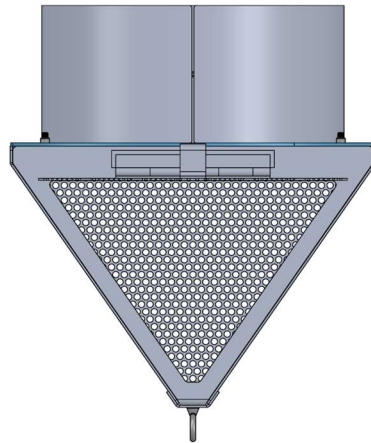
The Expanding StormRing CPS features a vector control access door allowing for visual and physical access by Vector Control personnel without requiring any confined space entry or lifting of grates. The door is a hinged perforated aluminum screen with a lifting tab located at the top of the Expanding StormRing CPS. The door can be accessed from above the Expanding StormRing CPS while a storm grate is over the unit. The lifting tab of the door is used to flip the door into its open position. When open, the door opening allows visual and physical access to the bottom of the catch basin for inspection or treatment by Mosquito Vector Control personnel. Additionally, consideration has been taken to ensure the device does not cause any standing water. This is addressed by two design features, large vertical adjustment range, and a perforated bottom screen. When installed the Expanding StormRing CPS is adjusted vertically down until the base of the device is flush and in contact with the floor of the catch basin. The bottom screen allows water to drain in and past the screens of the CPS, and flow downstream through the outlet pipe.



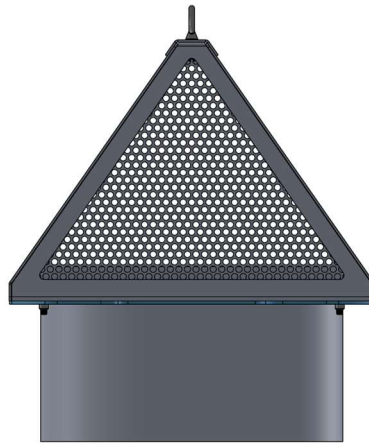
OPEN



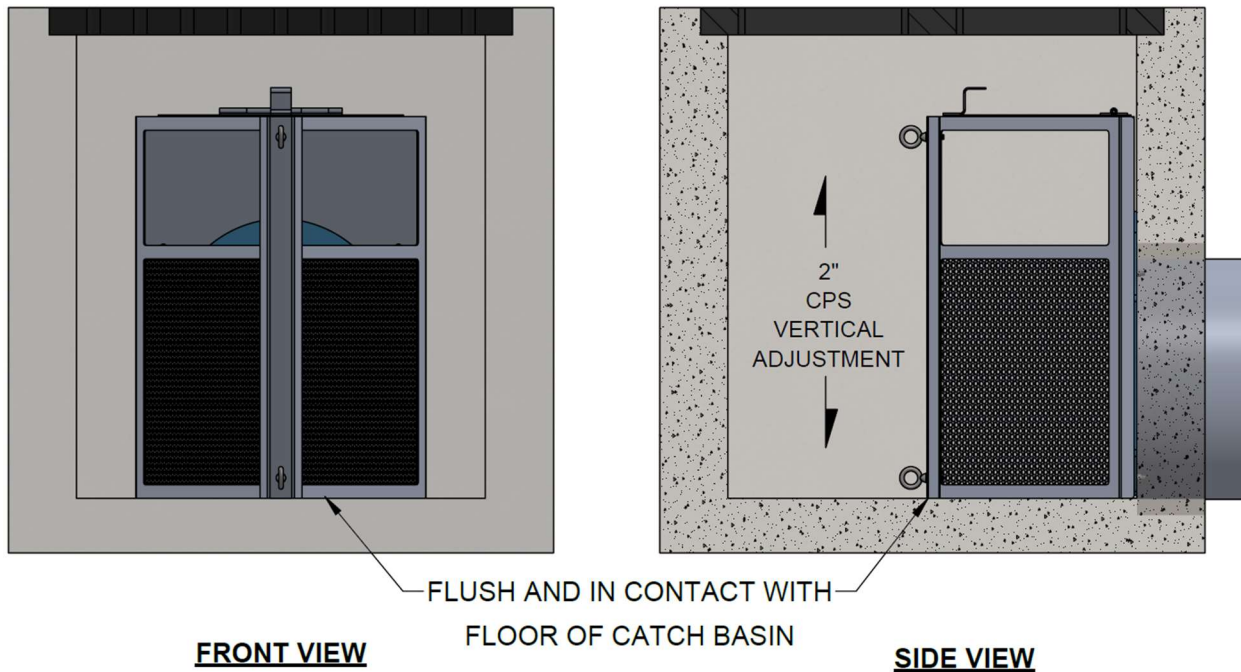
CLOSED



TOP



BOTTOM



6.C. Mosquito Vector Control Association of California Letter of Verification

Please refer to Appendix B to find the MVCAC letter of verification for the Expanding StormRing CPS.

7. Reliability Information

7.A. Estimated Design Life of Device Components before Major Overhaul

The life expectancy of the Expanding StormRing CPS is estimated by consideration of the materials used to fabricate the Expanding StormRing CPS. With expected stormwater conditions and regular maintenance, the Expanding StormRing CPS has an estimated design life of 10 years.

7.B. Warranty Information

Fabco Industries, Inc., warrants that the Expanding StormRing CPS shall be free from defects in materials and workmanship for a period of 10 years from the date of delivery. The warranty coverage requires that the products must be installed in accordance with all site conditions required by state and local codes, applicable product or industry specifications and guidelines, manufacturer's installation recommendations and other applicable laws. Specifically excluded from the warranty are damages arising from ordinary wear and tear, alteration, or repair by anyone other than Fabco Industries, Inc. or under the direction of Fabco Industries Inc. Furthermore, damage due to accident, misuse, abuse or neglect, or any other event not caused by Fabco Industries Inc, is also not covered by the warranty.

If a warranty claim is made and determined to be valid, Fabco Industries Inc. will either repair or replace the product, solely at the discretion of Fabco Industries, Inc. All warranty claims must be submitted, evaluated, and approved by Fabco Industries, Inc., for the claim to be determined to be valid. There are no other warranties either expressed or implied other than what is specifically specified herein.

7.C. Customer Support Information

Fabco customer support can provide technical information and help with any questions regarding Fabco Industries' products. You can reach our customer support service at:

Fabco Industries, Inc.

390 Oser Avenue

Hauppauge, NY 11788

Phone: (631) 393-6024

Email: sales@fabco-industries.com

Website: fabco-industries.com

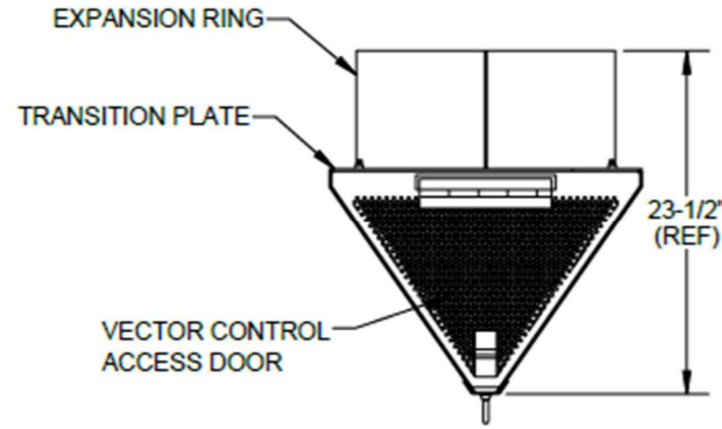
8. Field/Lab Testing Information and Analysis

The entire design flow must flow through the 5mm perforated screen so all trash larger than 5 mm is captured from the peak design flow. Field/Lab testing is not required for the Expanding StormRing CPS. All treated design flow must pass through the screen to enter the outlet pipe, and as such all trash 5mm or larger in diameter within the treatment flow will be physically blocked from passing through. Existing installations of the Expanding StormRing CPS, including project sites in California, have yielded only positive results.

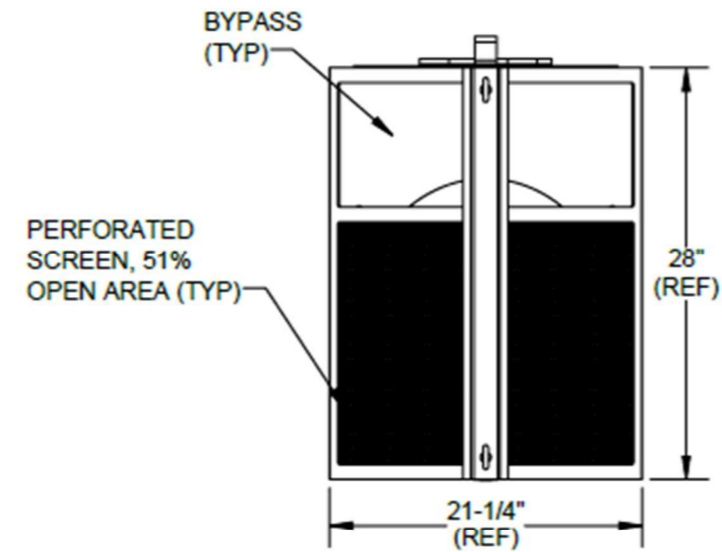
APPENDIX A

NOTES:

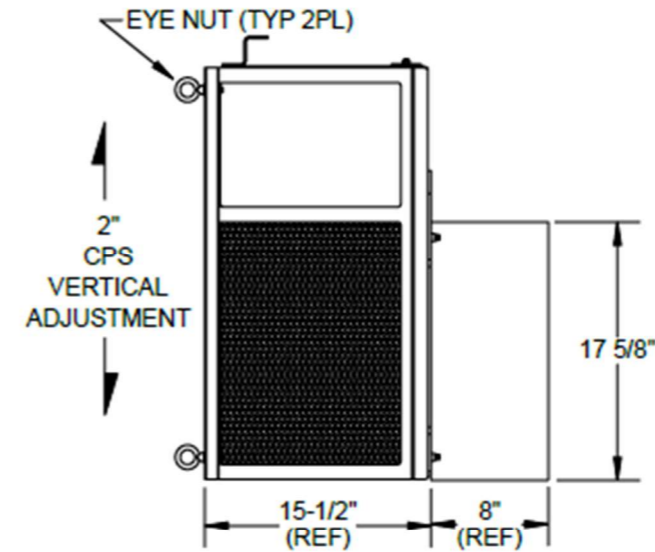
1. MATERIAL:
 - A) FRAME AND EXPANDING RING: ALUMINUM
 - B) HARDWARE: STAINLESS STEEL.
2. PERFORMANCE CHARACTERISTICS:
 - A) FLOW RATE: 3,470 GPM (7.7 CFS)
 - B) BYPASS FLOW RATE: BYPASS FLOW AREA IS GREATER THAN THE OUTLET PIPE FLOW AREA
3. THE FRONT SCREEN ASSEMBLY CAN BE RAISED OR LOWERED 2" VERTICALLY FOR TO MATCH THE OUTLET PIPE INVERT DURING INSTALLATION.
4. TYPICAL INSTALLATION: CAREFULLY INSERT THE EXPANDING RING INTO THE OUTLET PIPE OPENING AND FLUSH WITH THE EDGE OF THE PIPE MOUTH OPENING. VERIFY THAT THE GAP OF THE EXPANDING RING IS LOCATED AT THE 12-O'CLOCK POSITION. THEN, TORQUE THE LARGE HEX BOLT IN THE RING TO EXPAND THE RING AGAINST THE INSIDE DIAMETER OF THE PIPE. VERIFY THAT THE RING IS SECURED TO THE INNER WALLS OF THE PIPE OPENING. NEXT, ALIGN THE TRANSITION PLATE WITH THE (4) STANDOFFS ON THE EXPANDED RING, AND SECURE THE PLATE ONTO THE RING USING THE PROVIDED HEX BOLTS AND WASHERS. THEN, ALIGN THE BACKPLATE SLOTTED BOLT HOLES WITH THE PREVIOUSLY SECURED TRANSITION PLATE, ADJUST THE VERTICAL HIGHT OF THE PLATE AS REQUIRED AND SECURE THE PLATE IN PLACE USING THE PROVIDED HEX BOLTS, WASHERS AND SPACERS. FINALLY, ATTACH THE FRONT COVER USING THE 2-EYE NUTS.



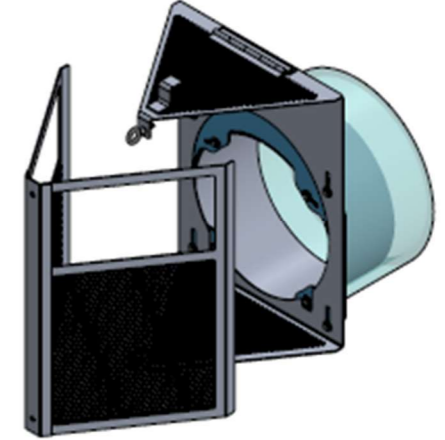
TOP VIEW



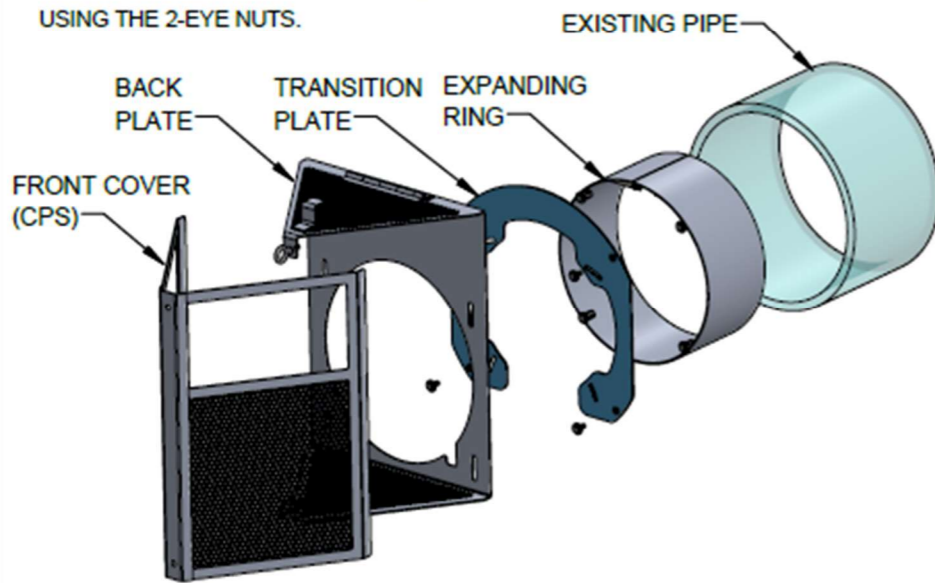
FRONT VIEW



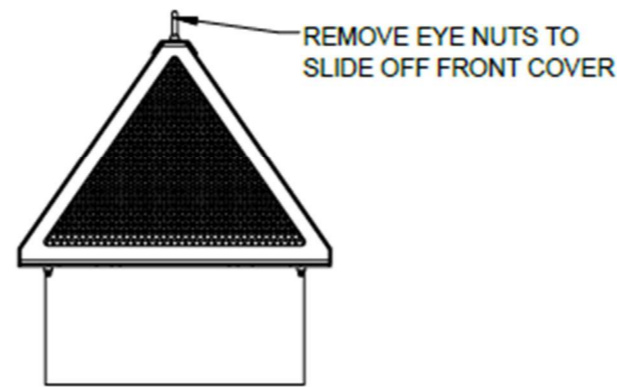
SIDE VIEW



REMOVE FRONT COVER FOR MAINTENANCE



EXPLODED VIEW OF ALL COMPONENTS



BOTTOM VIEW

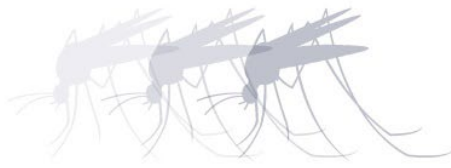


ENGINEER AND CONTRACTOR NOTE: FABCO INDUSTRIES WATER QUALITY INSERTS (WQIS) ARE MANUFACTURED TO PROPERLY FIT INLETS BY USING SPECIFIC INFORMATION COMPILED IN A SURVEY OF THE "AS-BUILT" INLET. IN RETROFIT SITUATIONS THE SURVEY IS DONE TO DOCUMENT THE THREE CRITICAL ASPECTS OF WQI DESIGN (GRATE/FRAME MEASUREMENTS, OPEN/CLEAR SPACE MEASUREMENTS, AND PROTRUSION MEASUREMENTS). IN NEW CONSTRUCTION, FABCO PRODUCT DRAWINGS ARE ESSENTIALLY PLACE HOLDERS BASED ON THE SPECIFIED INLETS. ONCE THE INLETS ARE BUILT, THE PROCESS REVERTS TO THE RETROFIT APPROACH OF SURVEYING THE AS-BUILT INLETS TO CONFIRM FABCO INSERT DESIGN. PLEASE USE THE QR CODE TO ACCESS THE SURVEY FORM AND COMPREHENSIVE GUIDANCE OF THE SURVEY PROCESS. ALTERNATIVELY, NAVIGATE TO www.fabco-industries.com/stormwater-inlet-survey-assistance

PROPRIETARY AND CONFIDENTIAL
THIS DOCUMENT IS THE PROPERTY OF FABCO INDUSTRIES AND IS CONVEYED WITH THE EXPRESS CONDITION THAT IT AND THE INFORMATION CONTAINED IN IT ARE NOT TO BE USED, DISCLOSED, OR REPRODUCED IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN CONSENT OF FABCO INDUSTRIES, AND THAT NO RIGHT IS GRANTED TO DISCLOSE OR SO USE ANY INFORMATION CONTAINED IN SAID DOCUMENT.

UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS BREAK SHARP EDGES .002 - .020 FILLETS .020 MAX DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		TOLERANCES: DEC .00 & .01 DEC .000 & .005 FRACT & 1/16 ANGLE & 2"		APPROVAL DATE	
PROJECT		DWN J.C. 3/21/2023		CHKR	
MATERIAL		ENGR J.P. 3/21/2023		UPD C.G. 6/20/2023	
FABCO INDUSTRIES, INC. 24 CENTRAL DRIVE FARMINGDALE, NY 11735 WWW.FABCO-INDUSTRIES.COM		FABCO INDUSTRIES, INC. 24 CENTRAL DRIVE FARMINGDALE, NY 11735 WWW.FABCO-INDUSTRIES.COM			
SCALE: NONE		SHEET 1 OF 1		ALUMINUM EXPANDING STORMING CPS FOR 18" PIPE SIZE: B DWA: NO. SCA18-1-000 REV: B	

APPENDIX B



MVCAC
Mosquito and Vector Control Association of California

One Capitol Mall, Suite 320 • Sacramento, CA 95814 • p: (916) 440-0826 • f: (916) 444-7462 • e: mvcac@mvcac.org

Mr. Hime Athar
Fabco Industries, Inc
390 Oser Avenue.
Hauppauge, NY 11788

August 28, 2023

Dear Mr. Athar,

Thank you for the submission of the Fabco Expanding StormRing CPS full trash capture device for review by the Mosquito and Vector Control Association of California pursuant to the SWRCB Trash Treatment Control Device Application Requirements. The Association has reviewed the conceptual drawings for the Fabco Expanding StormRing CPS and verifies that provisions have been included in the design 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 Fabco Expanding StormRing CPS 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,

Megan MacNee
MVCAC Executive Director