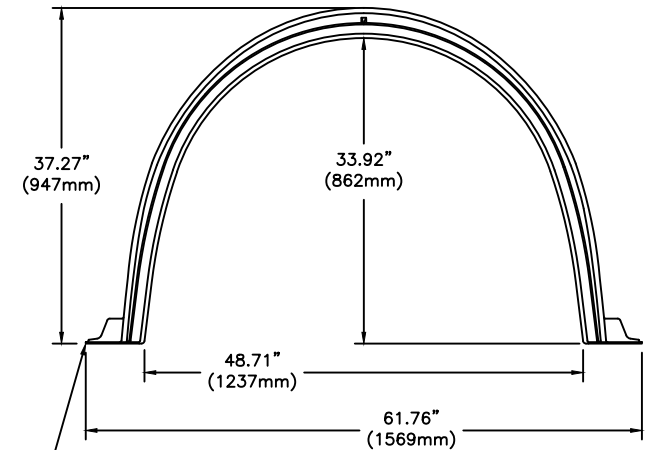


| S-29B CHAMBER SPECS                                   |   |
|---|---|
| NOMINAL DIMENSIONS<br>(LAYUP LENGTH X WIDTH X HEIGHT) | 33.35" x 61.76" x 37.27"<br>[847mm x 1569mm x 947mm]  |
| BARE CHAMBER STORAGE                                  | 27.80 ft <sup>3</sup><br>[0.787 m <sup>3</sup> ]      |
| *MIN INSTALLED STORAGE                                | 42.07 ft <sup>3</sup><br>[1.191 m <sup>3</sup> ]      |
| CHAMBER WEIGHT  | 34 lbs<br>[15.42 kg]                                  |
| STORAGE PER LINEAR UNIT<br>WITHOUT STONE              | 10.0 ft <sup>3</sup> /ft<br>[0.929 m <sup>3</sup> /m] |
| STORAGE PER LINEAR UNIT<br>WITH STONE                 | 15.1 ft <sup>3</sup> /ft<br>[1.406 m <sup>3</sup> /m] |

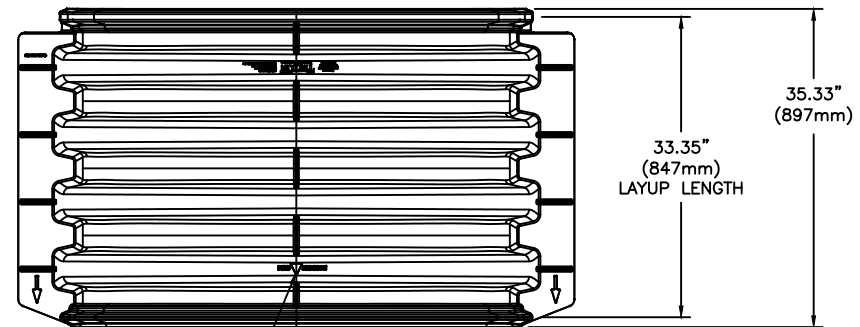
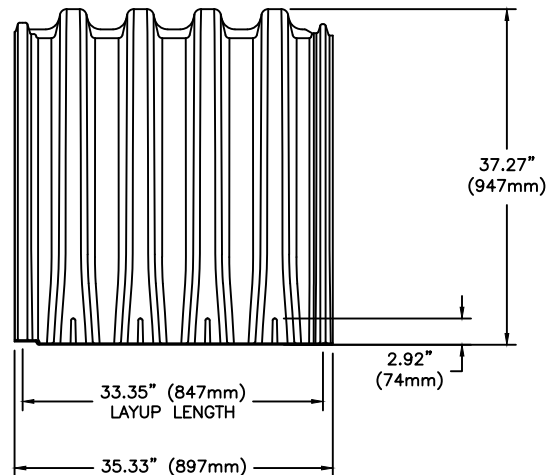
\*ASSUMING A MIN OF 6" (152mm) STONE ABOVE AND BELOW AND 5" (127mm) BETWEEN ROWS WITH 40% STONE POROSITY (DOES NOT INCLUDE 12" (305mm) PERIMETER STONE VOLUME)

NOTE: S-29B CHAMBER DETAILS TESTED AND RATED TO EXCEED HS-25 LOAD CONDITIONS WITH 18" (457mm) OF COVER AND NO PAVEMENT.

EACH S-29B CHAMBER HAS A TOTAL FLANGE SURFACE CONTACT AREA OF 294 IN<sup>2</sup> (1896 CM<sup>2</sup>) OR 147 IN<sup>2</sup> (948 CM<sup>2</sup>) PER FLANGE



PART THICKNESS  
0.118" - 0.177"  
[3.0mm - 4.5mm]



CHAMBERS TO BE INSTALLED IN THIS DIRECTION. FOLLOW DIRECTION ARROW ON THE PART.

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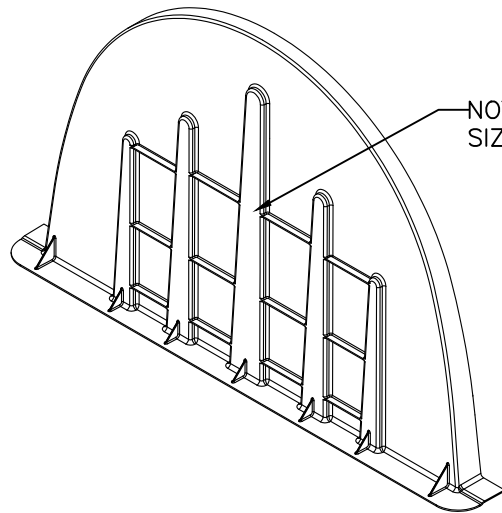


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## S-29B CHAMBER DETAIL

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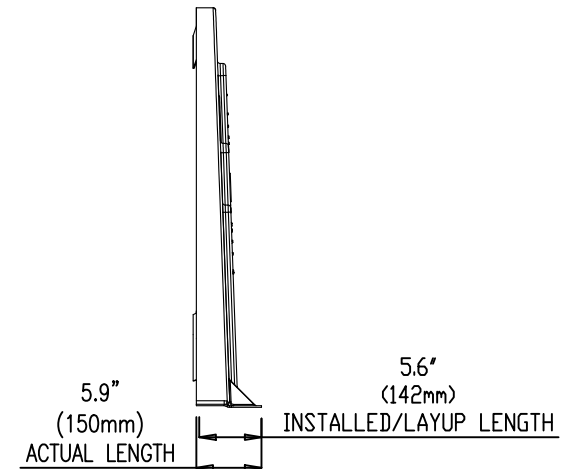
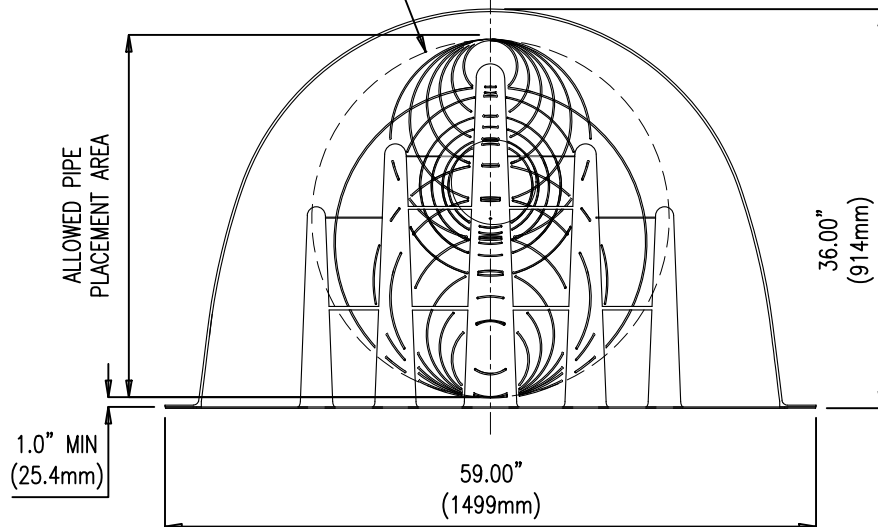
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| S-29 END CAP SPECS  |   |
|---|---|
| NOMINAL DIMENSIONS<br>(LAYUP LENGTH X WIDTH X HEIGHT)   | 5.90" X 59.00" X 36.00"<br>(150mm X 1499mm X 914mm) |
| BARE END CAP STORAGE  | 1.031 CUBIC FEET<br>(0.029 CUBIC METERS)            |
| *MIN INSTALLED STORAGE  | 4.98 CUBIC FEET<br>(0.141 CUBIC METERS)             |
| *ASSUMING A MIN OF 6" (152mm) STONE ABOVE AND BELOW AND 7.5" (191mm) BETWEEN ROWS WITH 40% STONE POROSITY (DOES NOT INCLUDE 12" (305mm) PERIMETER STONE VOLUME) |   |

ø32" (810mm) MAX O.D.  
FOR END CONNECTION  
(see page 2 for guide diameters)

ALL PIPE CONNECTIONS  
MUST BE INSTALLED ALONG  
CHAMBER CAP CENTERLINE.



THE END CAP FITS UP ON THE OUTSIDE  
OF THE S-29 CHAMBER. REFER TO  
INSTALLATION MANUAL FOR FURTHER DETAIL.

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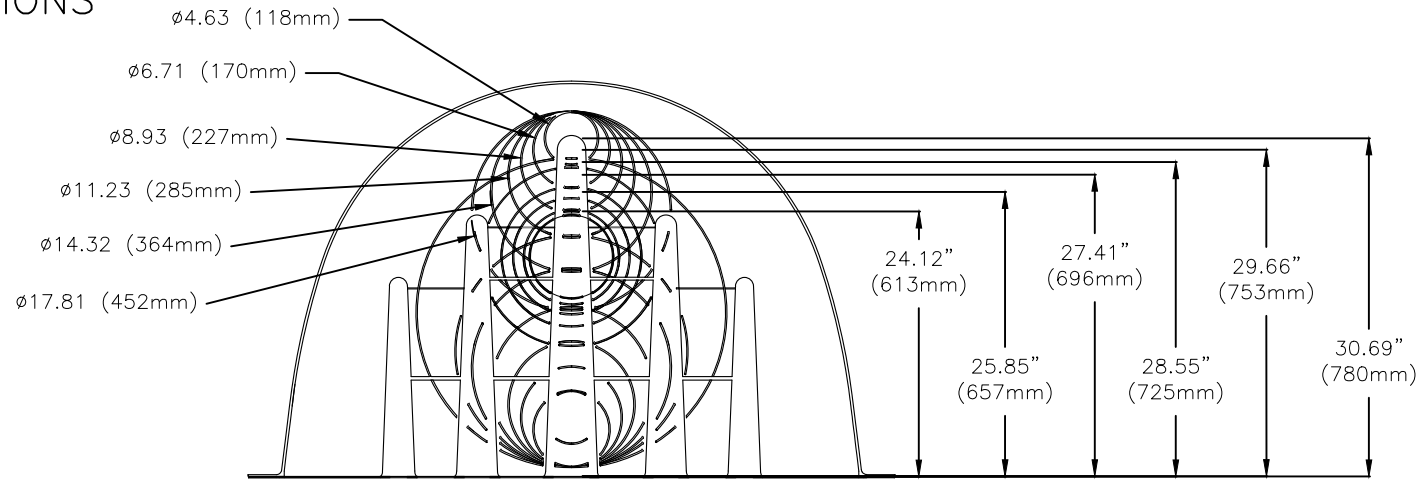
## S-29 CHAMBER END CAP DETAIL

TRITON - STANDARD DETAILS

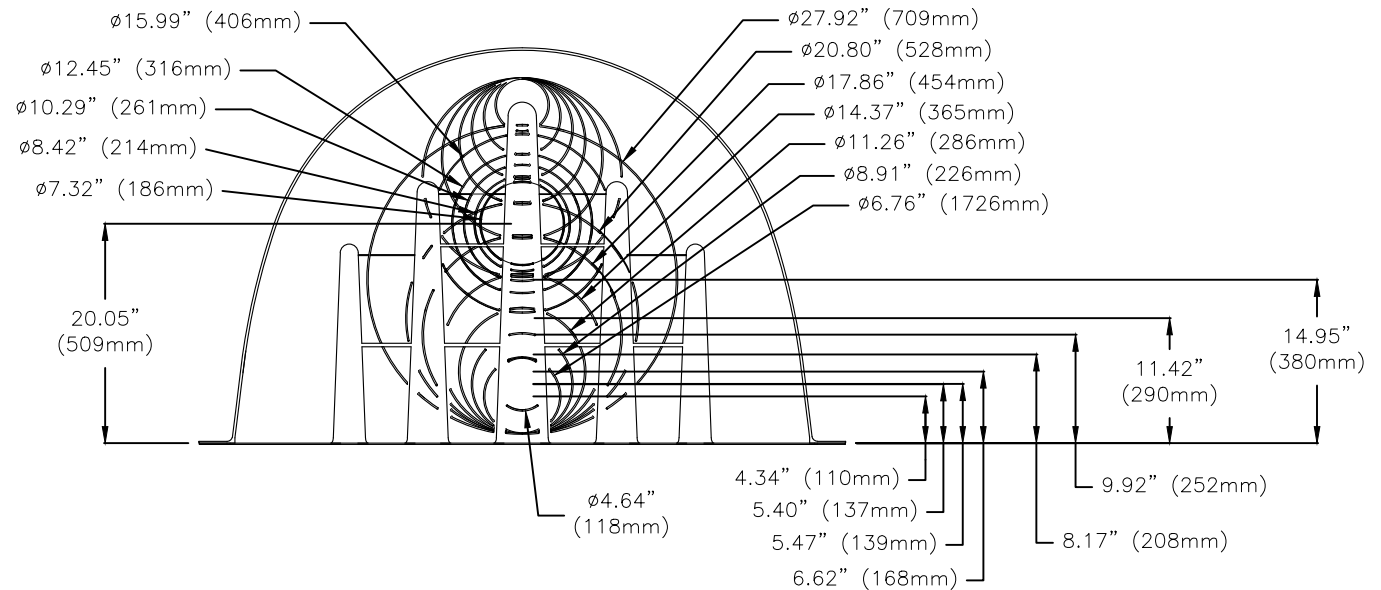
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## S-29 END CAP: TOP HOLE DIMENSIONS



## S-29 END CAP: CENTER AND BOTTOM HOLE DIMENSIONS



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## S-29 CHAMBER END CAP DETAIL

TRITON - STANDARD DETAILS

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# TRITON S-29B PRODUCT SPECIFICATIONS

## 1.0 General

1.1 Triton chambers are designed to control stormwater runoff. As a subsurface retention or detention system, Triton chambers retain and allow effective infiltration of water into the soil. As a subsurface detention system, Triton chambers detain and allow for the metered flow of water to an outfall.

## 2.0 Chamber Parameters

- 2.1 The chamber shall be injection compression molded of a structural grade PP Composite to be inherently resistant to environmental stress cracking (ESCR), creep, and to maintain proper stiffness through temperature ranges of 0 degrees Fahrenheit to 170 degrees Fahrenheit (-12 degrees Celsius to 76.7 degrees Celsius).
- 2.2 The nominal chamber dimensions of the Triton S-29B shall be 37.27 inches tall (947 millimeters), 61.76 inches wide (1569 millimeters) and 35.33 inches long (897 millimeters). Lay-up length is 33.35 inches (847 millimeters).
- 2.3 The chamber shall be open-bottomed.
- 2.4 The chamber shall incorporate an overlapping corrugation joint system to allow chamber rows to be constructed.
- 2.5 The nominal storage volume of a Triton S-29B chamber shall be 42.52 cubic feet (1.204 cubic meters) per chamber when installed per Triton's standard details. This equates to 15.3 cubic feet (1.421 m<sup>3</sup>/m) of storage per linear foot of bed. This does not include perimeter stone.
- 2.6 The chamber shall have both of its ends open to allow for unimpeded hydraulic flows and visual inspections down a row's entire length.
- 2.7 The chamber shall have six corrugations to achieve strengths defined above.
- 2.8 The Chambers structural integrity of the chamber has been evaluated in accordance with the requirements of ASTM F2787 and ASTM F2418. Based on the analysis, the S-29B meets the strength and service limit design requirements of ASTM F2787 for installations conditions described in the table below. Maximum cover conditions were evaluated with overburden soil density of 120 lb./ft<sup>3</sup>, HL93 Design Truck live loading and design load factors as required by AASHTO.

| Loading                              | Installed Spacing | Cover (ft) | Embedment/Material Modulus                         |
|--------------------------------------|-------------------|------------|--|
| Condition 1<br>Deep Burial + HL93    | 6-in              | 21         | 90% Compacted Crushed Stone/Low Strength Composite |
| Condition 2<br>Deep Burial + HL93    | 3-in              | 20         | 90% Compacted Crushed Stone/Low Strength Composite |
| Condition 3<br>Shallow Burial + HL93 | 6-in              | 1.5        | 90% Compacted Crushed Stone/Low Strength Composite |
| Condition 4<br>Shallow Burial + HL93 | 3-in              | 1.5        | 90% Compacted Crushed Stone/Low Strength Composite |

2.9 The S-29B stormwater chamber meets the design and performance requirements of ASTM F2787 when installed in accordance with the manufacturer's recommendations.

2.10 The chamber shall be manufactured in an ISO 9001:2008 certified facility

## 3.0 End Cap Parameters

- 3.1 The end cap shall be Injection Compression molded of 1010 green soy resin to be inherently resistant to environmental stress cracking (ESCR), creep and to maintain proper stiffness through temperature ranges of -40 degrees Fahrenheit to 180 degrees Fahrenheit (-40 degrees Celsius to 82.2 degrees Celsius).
- 3.2 The end cap shall be designed to fit over the last corrugation of a chamber, which allows: the capping of each end of the chamber row.
- 3.3 The end cap shall have six upper saw guides capable of accepting pipe O.D. up to 17.81 inches (452 millimeters), five middle saw guides capable of accepting pipe O.D. up to 15.99 inches (406mm) and eight lower saw guides capable of accepting pipe O.D. up to 27.92 inches (709 millimeters) to allow easy cutting for various diameters of pipe that may be used to inlet or outlet the system. See end cap detail for further details.
- 3.4 The end cap shall have excess structural adequacies to allow cutting an orifice per the size and location of the cut guides on the face of the end cap.
- 3.5 The primary face of an end cap shall have five corrugations and be angled outward to resist horizontal loads generated near the edges of beds.
- 3.6 The end cap shall be manufactured in an ISO 9001:2008 certified facility.
- 3.7 The nominal storage volume of a Triton S-29 end cap shall be 4.98 cubic feet (0.141 cubic meters) per end cap when installed per triton's typical details. This equates to 1.83 cubic feet (0.052 cubic meters) of storage per square foot of bed.

## 4.0 Installation

4.1 Installation shall be in accordance with the latest Triton Installation manual that can be downloaded from the Triton website: [www.tritonsws.com/support/downloads](http://www.tritonsws.com/support/downloads)

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# S-29B PRODUCT SPECIFICATIONS

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